

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1962

No. 23

PAN AMERICAN WORLD AIRWAYS, INC.,
APPELLANT,

vs.

UNITED STATES.

No. 47

UNITED STATES, APPELLANT,

vs.

PAN AMERICAN WORLD AIRWAYS, INC., ET AL.

APPEALS FROM THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

NO. 23 FILED JULY 25, 1961

NO. 47 FILED DECEMBER 1, 1961

JURISDICTION POSTPONED JANUARY 15, 1962

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- 230—Letter to L. Welch Pogue from A. Garni,
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542 811

- 231—Minutes of annual meeting of the board
of directors of Pan American Grace
Airways, Inc. held on April 27, 1943

543 812

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

232—Cablegram to Howard B. Dean from Harold J. Roig, dated January 6, 1944	547	815
233—Letter to Harold J. Roig from Evan E. Young, dated January 7, 1944	548	816
234—Letter to Evan Young from Harold J. Roig, dated January 10, 1944	550	818
235—Letter to Harold J. Roig from Howard B. Dean, dated March 13, 1944	551	819
236—Letter to Howard B. Dean from Harold J. Roig, dated March 21, 1944	552	820
238—Letter to Harold J. Roig from Howard B. Dean, dated June 29, 1944	555	821
239—Letter to Howard B. Dean from Harold J. Roig, dated July 5, 1944	557	823
240—Letter to Harold J. Roig from Howard B. Dean, dated July 20, 1944	558	824
241—Letter to Howard B. Dean from Harold J. Roig, dated July 25, 1944	560	827
242—Letter to Harold J. Roig from Howard B. Dean and Erwin Balluder, dated July 27, 1944	562	828

VOLUME III

243—Minutes of special meeting of the board of directors of Pan American-Grace Airways, Inc. held on July 31, 1944	564	831
244—Letter to W. R. Grace & Company from J. T. Trippe, dated April 3, 1945	572	838
245—Minutes of regular meeting of the board of directors of Pan American-Grace Airways, Inc., held on April 4, 1945	573	840
246—Letter to the president of Pan American Airways Corporation from D. S. Igle- hart, dated April 10, 1945	586	851
247—Letter to W. R. Grace & Company from J. T. Trippe, dated April 14, 1945	587	852

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

248—Telephone conversation between Mr. Dean and Mr. Roig on July 11, 1945, as recorded by Howard B. Dean	589	854
249—Letter to Harold J. Roig from Howard B. Dean, dated August 13, 1945	590	855
250—Letter to Howard B. Dean from Harold J. Roig, dated August 27, 1945	592	858
251—Letter to Howard B. Dean from Harold J. Roig, dated January 17, 1946	595	860
252—Letter to Harold J. Roig from Howard B. Dean, dated February 21, 1946	596	861
254—Letter to Howard B. Dean from Harold J. Roig, dated April 11, 1946	599	863
255—Letter to Harold J. Roig from Henry J. Friendly, dated April 15, 1946	601	864
256—Letter to John C. Cooper from Harold J. Roig, dated May 24, 1946, enclosing a memorandum entitled "Pan Amer- ican-Grace Airways, Inc., notice of special meeting of board of directors, May 28, 1946," dated May 24, 1946, by W. F. Cogswell	603	866
257—Letter to J. T. Trippe from J. P. Grace, Jr., dated May 31, 1946	605	869
258—Memorandum of extracts from minutes of Pan American Airways Corporation, board of directors meeting, June 4, 1946	608	872
259—Minutes of adjourned special meeting of board of directors of Pan American- Grace Airways, Inc. held on June 5, 1946	609	873
260—Minutes of an adjourned special meeting of the board of directors of Pan Amer- ican-Grace Airways, Inc. held on June 11, 1946	614	878
261—Minutes of board of directors of Pan American dated July 2, 1946	615	879

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued.

Original Print

262—Excerpts from minutes of meeting of board of directors of W. R. Grace & Company, dated July 3, 1946	618	881
263—Letter to Howard B. Dean from Prescott S. Bush, dated July 8, 1946, and at- tached thereto a memorandum entitled "Subject: P.A.A. Grace"	619	883
264—Excerpts from minutes of executive com- mittee meetings of Pan American, dated July 9, 1946, July 16, 1946, July 23, 1946, July 30, 1946, and a meeting of the board of directors of Pan Amer- ican, dated August 6, 1946	623	886
265—Extracts from the minutes of Pan Amer- ican Airways, Inc., dated July 30, 1946, and August 6, 1946	625	888
266—Agreement between Pan American Air- ways, Inc. and Pan American Grace Airways, Inc., dated July 30, 1946 (commonly referred to as the through- flight agreement)	626	889
267—Agreement between W. R. Grace & Com- pany and Pan American Airways Corporation dated July 30, 1946, (commonly referred to as the parent company agreement)	629	892
268—Letter to James M. Landis, Chairman, Civil Aeronautics Board, from Henry J. Friendly, Cahill, Gordon, Bailey & Reissel, and Gerhard A. Gesell, dated August 19, 1946	636	899
269—Excerpts from memorandum agreement regarding services rendered and to be rendered to Panagra by the parent com- panies and compensation therefor, dated July 14, 1948, and signed by Harold J. Roig for Panagra; E. Bal- luder for Pan American, and Andrew B. Shea for W. R. Grace & Company	638	901

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

PAN AMERICAN-PANAGRA COMPETITION

270—Letter to R. H. Patchin from Harold J. Roig, dated October 30, 1930	645	906
271—Letter to D. S. Iglehart from Harold J. Roig, dated December 9, 1930	647	907
272—Memorandum entitled "Pan American-Grace Airways," dated March 2, 1931, by Harold J. Roig	648	909
273—Letter to J. D. MacGregor from G. Vidal, dated October 23, 1931	651	911
276—Letter to J. D. MacGregor from H. R. Harris, dated October 27, 1933	656	912
277—Letter to H. R. Harris from J. D. MacGregor, dated November 6, 1933	657	913
278—Letter to J. D. MacGregor from H. R. Harris, dated November 20, 1933	659	914
279—Letter to Harold J. Roig from A. Garni, dated February 22, 1934	660	915
280—Letter to Harold J. Roig from D. S. Iglehart, dated August 6, 1934	662	917
281—Letter to Harold J. Roig from D. S. Iglehart, dated August 13, 1934	663	918
282—Memorandum of conversation with J. T. Trippe, September 14, 1934	666	920
284—Letter to A. Garni from D. S. Iglehart, dated March 26, 1935	670	921
286—Letter to A. Garni from Harold J. Roig, dated May 11, 1935	673	922
287—Letter to A. Garni from J. D. MacGregor, dated January 24, 1936	679	926
288—Letter to C. V. Whitney from D. S. Iglehart, dated August 4, 1936	681	927
289—Pan American intercompany memorandum entitled "BUE Sales Folder," by Ernest L. Foss, dated February 8, 1947	684	929

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

294—Intercompany Pan American memorandum by Amos Hiatt, dated June 19, 1947	689	930
295—Pan American intercompany memorandum entitled "Panagra Through Flight Agreement" by R. G. Ferguson, dated June 24, 1947	691	931
296—Pan American-Graeco intercompany memorandum addressed to J. T. Shannon from James W. Walker, Jr., dated May 21, 1948	693	933
298—Pan American intercompany memorandum entitled "Buenos Aires Sales to the United States," by F. H. Sheldon, dated August 17, 1948	695	934
299—Pan American intercompany memorandum entitled "Buenos Aires Sales to the United States," by Mario J. Martinez, dated August 25, 1948	696	935
300—Memorandum to A. B. Shea from J. P. Graeco, Jr., dated April 22, 1949	697	936
301—Pan American intercompany memorandum entitled "MIA-BUE Tourist Fares" by Willis G. Lipcomb, dated May 26, 1949	699	938
302—Letter to J. W. Walker, Jr., from Douglas Campbell, dated June 23, 1949	700	938
303—Letter to Porter Norris from Juan Homs, Jr., dated September 1, 1949	701	939
304—Pan American intercompany memorandum entitled "Panagra Representation-Buenos Aires," by Porter Norris, dated September 7, 1949	703	942
306—Pan American intercompany memorandum by John E. Muhlfeld, dated November 29, 1949	706	943
307—Letter to Douglas Campbell from Andrew B. Shea, dated January 10, 1950	708	945

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued		
Government's Exhibits—Continued		
308—Memorandum to A. B. Shea from J. P. Grace, Jr., dated January 13, 1950	711	947
309—Memorandum to Andrew B. Shea from J. P. Grace, Jr., dated January 18, 1950	713	948
311—Pan American intercompany memorandum entitled "Panagra" by E. Balluder, dated July 28, 1950	715	949
313—Memorandum to Andrew B. Shea from J. P. Grace, Jr., dated August 13, 1950	719	951
314—Note to Admiral Towers, by R. W. B., dated January 29, 1951	721	953
316—Memorandum entitled "Report of Call Covering Several Meetings on Pan American Airways," dated March 30, 1951	723	954
317—Pan American intercompany memorandum by Juan Homs, Jr., dated April 4, 1951	724	955
318—Pan American intercompany memorandum entitled "Panagra Promotion" by Porter Norris, dated April 4, 1951	726	957
320—Memorandum to Andrew B. Shea from J. P. Grace, Jr., dated April 28, 1951	729	958
324—Letter to Porter Norris from Juan Homs, Jr., dated May 18, 1951	735	960
325—Memorandum by Howard L. Clark, dated May 25, 1951	737	961
328—Pan American intercompany memorandum entitled "Panagra Sales Force," by Erwin Balluder, dated June 26, 1953	740	962
329—Letter to Edward G. Bern from Roger V. Rowe, dated August 13, 1953	741	963
332—Pan American intercompany memorandum entitled "Monthly Sales Report—Buenos Aires, September 1953," by Fred F. Plimpton	745	965

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

GRACE LINE-PANAGRA COMPETITION

333—Letter to Harold J. Roig from D. S. Iglehart, dated March 13, 1930	747	966
334—Memorandum for Mr. Garni from D. S. Iglehart, dated April 21, 1930	749	968
335—Memorandum to Roig, Patchin and Cogswell from D. S. Iglehart, dated October 15, 1931	751	969
336—Memorandum for Mr. Zalles from W. F. Cogswell, dated March 29, 1932	753	970
337—Letter to G. Vidal from J. D. MacGregor, dated May 17, 1932	754	971
338—Letter to Grace Line, Inc., from W. R. Grace & Co. at Lima, dated January 20, 1933	756	972
339—Letter to J. D. MacGregor from Harold R. Harris, dated February 17, 1933	758	974
340—Letter to J. M. Van Law from J. D. MacGregor, dated March 18, 1933	759	975
341—Memorandum to Mr. Mann from W. F. Cogswell, dated March 21, 1933	761	976
342—Letter to A. Garni from D. S. Iglehart, dated April 26, 1933	762	977
343—Memorandum for Mr. Garni from W. F. Cogswell, dated May 24, 1933	763	978
344—Letter to J. D. MacGregor from T. J. Kirkland, dated September 26, 1933	764	979
345—Letter to H. H. G. Redshaw from A. Garni, dated October 27, 1933	766	981
346—Memorandum by G. P. Smith, dated December 17, 1934	770	983
347—Letter to G. Vidal from H. R. Harris, dated August 26, 1935	771	985
348—Pan American-Grace intercompany memorandum entitled "Platinum Shipments from Buenaventura" by G. P. Smith, dated December 20, 1935	772	986

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

Original Print

349—Pan American-Grace intercompany memorandum entitled "Platinum Shipments Buenaventura/New York" by G. P. Smith, dated December 27, 1935	773	987
350—Pan American-Grace intercompany memorandum entitled "Platinum Shipments URA/NYK" by G. P. Smith, dated January 4, 1936	775	989
351—Pan American-Grace intercompany memorandum entitled "Platinum Shipments" by G. Vidal, dated January 20, 1936	776	990
352—Pan American-Grace intercompany memorandum entitled "Gold / Platinum Shipments" by G. Vidal, dated February 7, 1936	779	991
353—Letter to J. T. Kirby from Parold J. Roig, dated February 10, 1936	780	992
354—Letter to A. Garni from Manuel Holguin, dated February 22, 1936	783	994
355—Cablegram to A. Garni from Holguin, dated March 4, 1936	785	996
356—Letter to Manuel Holguin from A. Garni, dated March 9, 1936	786	997
357—Letter to J. E. Zalles from Manuel Holguin, dated March 9, 1936	787	998
358—Pan American-Grace intercompany memorandum entitled "Platinum Shipments" by G. P. Smith, dated March 10, 1936	788	999
359—Letter to Manuel Holguin from A. Garni, dated March 21, 1936	790	1001
360—Letter to Panama Agencies Co., agents for Panagra, from G. Vidal, dated March 26, 1936	791	1002
361—Letter to Manuel Holguin from Harold J. Roig, dated March 30, 1936	792	1003

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

Original Print

362—Letter to H. R. Harris from A. E. Sinclair, dated June 4, 1936	793	1004
363—Letter to J. D. MacGregor from H. R. Harris, dated July 16, 1936	794	1005
364—Letter to A. E. Sinclair from G. Jimenez Arrarte, dated August 24, 1936	795	1008
365—Letter to G. Vidal from J. D. MacGregor, dated September 19, 1936	798	1009
366—Letter to G. Vidal from J. D. MacGregor, dated October 7, 1936	799	1010
367—Letter to J. D. MacGregor from J. E. Muhlfield, dated April 10, 1937	800	1011
368—Memorandum to J. E. Muhlfield by G. Vidal entitled "Passenger Tariffs" dated July 19, 1937	801	1012
369—Letter to Panagra, Cristobal, Panagra, Lima, etc., from J. E. Muhlfield, dated August 3, 1937	802	1013
370—Letter to John E. Muhlfield from A. F. Mata, dated August 17, 1937	803	1014
371—Letter to H. R. Harris from J. E. Muhlfield, dated September 17, 1937	804	1016
372—Letter to J. E. Muhlfield from G. Vidal, dated September 24, 1937	807	1019
373—Letter to D. S. Iglehart from Harold J. Roig, dated September 28, 1937, enclosing a memorandum entitled "Increase in Rates" by H. J. Roig, dated September 28, 1937	808	1020
374—Letter to A. E. Sinclair from G. Jimenez, dated March 8, 1938	812	1022
375—Letter to J. D. MacGregor from J. E. Muhlfield, dated April 4, 1938	813	1024
376—Letter to Harold J. Roig from Robert H. Patchin, dated April 20, 1938	815	1025
377—Letter to R. H. Patchin from Harold J. Roig, dated April 27, 1938	816	1026

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued Government's Exhibits—Continued		
378—Draft of letter to Pan American Airways Corp. from W. R. Grace & Co., dated July 28, 1941	818	1027
379—Letter to James Magner from R. C. Lounsbury, dated February 25, 1942	819	1028
380—Letter to H. Helbling from J. E. Muhl- feld, dated March 4, 1942	820	1029
381—Letter to George L. Rihl from S. J. Roll, dated January 12, 1943	821	1030
382—Confidential memorandum from Mr. A. E. Sinclair to Mr. R. Ferguson, dated January 20, 1943	822	1031
383—Letter to Carlos Velarde C. from George G. Mason, dated May 13, 1949	824	1034
384—Pan American-Grace inter-company mem- orandum to John T. Shannon from John E. Muhlfield, dated July 7, 1949	825	1035
385—Grace cablegram to W. R. Grace, Lima, dated July 26, 1949	826	1035
386—Letter to J. T. Shannon from G. G. Mason, dated August 27, 1949	828	1037
387—Memorandum to J. W. Starbuck, Jr. from G. F. Sorgatz, Jr., dated January 26, 1951	830	1039
388—Letter to John D. J. Moore from Tolbert A. Rice, dated May 11, 1951	831	1040
389—Note to R. G. L. from H. A. B., dated November 7, 1951	832	1040
390—Letter to Fausto Moscoso from P. Gjert- sen, dated November 16, 1951	833	1041
391—Note to Assistant Vice President Traffic/ Sales-C. W. Moore from W. H. R., dated November 19, 1951	834	1042
392—Pan American inter-company memoran- dum entitled "Pepsi-Cola Company— Colon Free Zone," by J. A. Soto, dated May 27, 1952	836	1043

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

393—Letter to Louis A. Person from R. C. Lounsbury, dated September 4, 1952	838	1045
394—Pan American inter-company memoran- dum entitled "Monthly sales report— Buenos Aires, January, 1953," by Fred F. Plimpton, dated February 11, 1953	839	1046
395—Cablegram to Valverde from Harold J. Roig, dated July 23, 1935	841	1047

GRACE CONTROL

400—Memorandum for Patchin and Cogswell, unsigned, dated April 18, 1929	847	1048
401—Letter to J. H. Parmerton from Zalles, dated June 8, 1929	849	1050
402—Letter to L. Valverde from Howard J. Roig, dated January 30, 1930	851	1051
403—Letter to Harold J. Roig from D. S. Igle- hart, dated March 7, 1930	852	1052
404—Letter from H. R. Harris to Pan Amer- ican-Grace Airways, Inc., dated April 9, 1930	855	1054
405—Memorandum dated August 18, 1930, by H. R. Harris	856	1055
406—Letter to Harold J. Roig from D. S. Iglehart, dated October 10, 1930	858	1057
408—Letter to W. R. Grace & Company, Lima, by Thommen, dated November 27, 1930	860	1058
409—Letter to H. R. Roig from J. J. Heavey, dated July 24, 1931	863	1060
410—Letter to H. R. Harris from J. D. Mac- Gregor, dated May 6, 1932	865	1061
411—Letter to D. S. Iglehart from Harold J. Roig, dated June 15, 1932	867	1063
412—Letter to L. Valverde from Harold J. Roig, dated July 15, 1932	868	1064
413—Letter to Harold J. Roig from Valverde, dated July 30, 1932	869	1065

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued Government's Exhibits—Continued		
414—Letter to Harold J. Roig from Valverde, dated August 5, 1932	871	1067
415—Letter to Harold J. Roig from Valverde, dated August 6, 1932	874	1069
416—Letter to A. Garni from Harold J. Roig, dated February 24, 1933	876	1071
417—Letter to Harold J. Roig from A. Garni, dated March 6, 1933	880	1073
418—Letter to A. Garni from Harold J. Roig, dated April 6, 1933	882	1074
419—Letter to Harold J. Roig from A. Garni, dated April 18, 1933	884	1076
420—Letter to H. R. Harris from J. D. Mac- Gregor, dated September 6, 1933	886	1077
421—Letter to J. D. MacGregor from H. R. Harris, dated September 13, 1933	888	1079
422—Letter to J. D. MacGregor from H. R. Harris, dated October 2, 1933, enclos- ing letter to H. R. Harris from T. J. Kirkland, dated September 28, 1933	889	1080
423—Letter to Valverde from A. Garni, dated October 27, 1933	892	1082
424—Letter to A. Garni from Harold J. Roig, dated January 31, 1934	893	1083
425—Letter to A. Garni from Harold J. Roig, dated March 9, 1934, enclosing as an attachment a letter to Valverde from A. Garni, dated March 12, 1934	895	1085
426—Letter to Harold J. Roig from A. Garni, dated March 15, 1934	898	1087
427—Letter to John T. Kirby from A. Garni, dated April 3, 1934	899	1088
428—Letter to A. Garni from J. T. Kirby, dated April 23, 1934	900	1089
429—Letter to J. T. Kirby from Harold J. Roig, dated May 3, 1934	902	1090
430—Letter to A. Garni from J. T. Kirby, dated October 24, 1934	903	1091

Original Print

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

431—Letter to A. Garni from Harold J. Roig, dated March 30, 1935	905	1093
432—Letter to A. Garni from Harold J. Roig, dated April 6, 1935	907	1094
433—Letter to A. Garni from Harold J. Roig, dated May 28, 1935	909	1095
434—Letter to Harold J. Roig from Andrew B. Shea, dated January 22, 1936	910	1096
435—Letter to Harold J. Roig from J. T. Kirby, dated April 17, 1936	912	1098
436—Letter to Harold J. Roig from R. H. Patchin, dated May 12, 1936	913	1098
437—Letter to Panagra, New York, from H. R. Harris, dated August 29, 1936	914	1099
438—Memorandum to H. J. Roig from R. H. Patchin, dated September 18, 1936	915	1100
439—Memorandum for Mr. Kirby from Doug- las Campbell, dated October 23, 1936	916	1100
440—Memorandum for Mr. Roig from Douglas Campbell, dated December 23, 1936	918	1103
441—Letter to H. J. Roig from Andrew B. Shea, dated December 31, 1936	922	1106
442—Letter to J. D. MacGregor from H. R. Harris, dated March 11, 1937	924	1108
443—Letter to J. D. MacGregor from H. R. Harris, dated April 5, 1937	926	1110
444—Letter to J. E. Muhlfeld from J. D. Mac- Gregor, dated June 23, 1937	927	1111
445—Letter to Harold J. Roig from A. Garni, dated September 29, 1937	928	1112
446—Memorandum entitled "Traffic reorgani- zation and correspondence" by J. E. Muhlfeld, dated December 28, 1937	930	1114
447—Memorandum from D. S. Izghart, dated February 18, 1938	932	1116
448—Letter to Harold J. Roig from D. S. Izle- hart, dated February 28, 1938	933	1117

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued Government's Exhibits—Continued		
449—Memorandum to Mr. Iglehart from R. H. Patchin, dated April 5, 1938	936	1119
450—Letter to H. R. Harris from J. D. Mac- Gregor, dated April 14, 1938	938	1120
451—Letter to Harold J. Roig from A. Garni, dated May 4, 1938	940	1122
452—Memorandum for Roig and Garni from D. S. Iglehart, dated August 10, 1938	942	1124
453—Memorandum to H. R. Harris from G. P. Smith, dated March 8, 1939	943	1124
454—Memorandum entitled "Services rendered Pan American-Grace Airways, Inc. by W. R. Grace & Co." by W. F. Cogswell in late 1939	946	1128
455—Letter to Harold J. Roig from G. Vidal, dated November 7, 1940	951	1131
456—Letter to Harold J. Roig from G. Vidal, dated November 21, 1940	952	1132
457—Letter to D. S. Iglehart from Andrew B. Shea, dated November 26, 1940	953	1134
458—Letter to Harold J. Roig from G. Vidal, dated December 17, 1940	957	1136
459—Letter to Harold J. Roig from Douglas Campbell, dated March 17, 1941	959	1138
460—Letter to D. S. Iglehart from Andrew B. Shea, dated April 19, 1941	962	1140
461—Pan American-Grace inter-company mem- orandum entitled "Ticket offices" to C. de Groot from J. E. Muhlfeld, dated May 7, 1941	965	1143
462—Letter to Douglas Campbell from Harold J. Roig, dated June 4, 1941	967	1144
463—Letter to Harold J. Roig from Douglas Campbell, dated June 9, 1941	968	1145
464—Letter to H. J. Roig from T. J. Kirk- land, dated February 3, 1942	969	1146
465—Letter to A. C. Poole from J. E. Muhlfeld, dated March 13, 1942	972	1149

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

466—Letter to J. E. Muhlfeld from A. C. Poole, dated October 24, 1942	973	1150
467—Cablegram to Roig from Garni, dated February 27, 1946	987	1167
468—Pan American inter-company memoran- dum addressed to Trippe, Friendly and Balluder entitled "Pan American- Grace Airways Operations" by Howard B. Dean, dated May 20, 1946	989	1169
471—Letter to J. W. Walker, Jr., from G. Vidal, dated July 23, 1948	999	1172
476—Letter to Andrew B. Shea from Harold J. Roig, dated October 29, 1948, and attached thereto memorandum entitled "Agency functions and responsibilities with respect to Panagra," by Harold J. Roig	1009	1174
477—Memorandum by Howard B. Dean, dated December 2, 1948	1013	1177
478—Letter to Ernesto Aranibar from John T. Shannon, dated April 2, 1949	1014	1179
479—Letter to D. Campbell from John T. Shannon, dated April 22, 1949	1015	1180
480—Memorandum to Mr. Shea from J. P. Grace, Jr., dated April 27, 1949	1017	1181
481—Letter to J. T. Kirby from Andrew B. Shea, dated August 26, 1949	1019	1182
482—Pan American inter-company memoran- dum entitled "South America—Passen- ger Fares" by John E. Muhlfeld, dated March 3, 1950	1022	1184
483—Memorandum to Howard L. Clark by M. Bellefond, dated July 11, 1950	1024	1186
484—Letter to Raul Simon from J. T. Kirby, dated June 27, 1951	1027	1188
485—Memorandum to Andrew B. Shea from J. P. Grace, Jr., dated September 26, 1951	1030	1191

Record from the United States District Court for
the Southern District of New York—Continued
Government's Exhibits—Continued

486—Letter to T. F. Williams from J. H. Stebins, dated November 25, 1952	1031	1191
487—Pan American inter-company memorandum by Juan Homs, Jr., dated February 21, 1953	1032	1192
489—Memorandum by M. J. Martinez, dated March 4, 1953	1035	1194

JOINT OFFICES PUBLICITY

491—Letter to H. R. Harris from J. D. MacGregor, dated September 3, 1930	1037	1195
492—Letter to Pan American-Grace Airways, New York, from H. R. Harris, dated September 11, 1930	1038	1196
493—Letter to J. D. MacGregor from Harold R. Harris, dated May 31, 1932	1039	1197
494—Letter to G. Vidal from J. D. MacGregor, dated June 2, 1932	1040	1198
495—Letter to H. R. Harris from J. D. MacGregor, dated July 6, 1932	1042	1199
496—Letter to J. D. MacGregor from Harold R. Harris, dated December 8, 1932, enclosing copy of letter to George L. Rihl from Harold R. Harris, dated December 8, 1932	1044	1200
497—Letter to H. R. Harris from J. D. MacGregor, dated December 20, 1932	1047	1204
498—Letter to A. Garni from Harold J. Roig, dated June 8, 1935	1050	1206
503—Pan American Airways system memorandum entitled "Representation of Pan Grace" by C. E. Moore, dated July 21, 1937	1060	1208
504—Letter to D. S. Iglehart from Harold J. Roig, dated October 22, 1937	1061	1209
505—Letter to Harold J. Roig from A. Garni, dated April 18, 1938	1064	1211

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued Government's Exhibits—Continued		
506—Letter to Juan Trippe from A. Garni, dated May 3, 1938	1067	1213
507—Memorandum to Mr. Young entitled "B. A. office" by H. J. Roig, dated January 9, 1940	1069	1214
508—Letter to H. J. Roig from T. J. Kirkland, dated June 19, 1942	1071	1216
509—Memorandum to Douglas Campbell from E. Balluder, dated April 15, 1948	1073	1217
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13—Supplement No. 9 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated January 24, 1951	1872	1952
14—Supplement No. 10 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated June 29, 1951	1875	1955
15—Supplement No. 11 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated January 1, 1952	1883	1964
16—Supplement No. 12 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated April 10, 1952	1891	1971
17—Supplement No. 13 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated September 25, 1952	1902	1986
18—Supplement No. 14 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated May 8, 1953	1903	1987
19—Supplement No. 15 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated January 20, 1954	1918	2009
20—Supplement No. 16 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated June 29, 1954	1934	2031

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

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| 21—Supplement No. 17 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated September 7, 1955 | 1935 | 2032 |
| 22—Supplement No. 18 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated August 4, 1955 | 1955 | 2065 |
| 23—Supplement No. 19 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated August 7, 1957 | 1962 | 2070 |
| 24—Supplement No. 20 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated July 11, 1958 | 1964 | 2072 |
| 25—Supplement Nos 21 to Through Flight Agreement between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated December 23, 1958 | 1966 | 2074 |
| 26—Equipment Interchange Agreement between National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. dated August 4, 1955 | 1978 | 2088 |
| 27—Supplement No. 1 to Equipment Interchange Agreement between National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. dated August 9, 1955 | 2020 | 2126 |

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

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| 28—Application as amended by Amendment No. 1 of National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. for approval of Equipment Interchange Agreement and amendment to Through Flight Agreement under Section 412 of the Civil Aeronautics Act and; if deemed necessary, for approval under or exemption from Section 408 of the said Act dated August 4, 1955 | 2033 | 2138 |
| 29—Amendment No. 1 to application of National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. for approval of Equipment Interchange Agreement and amendment to Through Flight Agreement under Section 412 of the Civil Aeronautics Act and, if deemed necessary, for approval under or exemption from Section 408 of the said Act dated August 10, 1955 | 2079 | 2177 |
| 30—Letter to Civil Aeronautics Board from K. A. Lawder dated August 29, 1955 | 2084 | 2181 |
| 31—Supplement No. 2 to Equipment Interchange Agreement between National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. dated August 22, 1955 | 2085 | 2182 |
| 32—Letter agreement between Pan American-Grace Airways, Inc. and National Airlines, Inc. dated August 24, 1955 | 2089 | 2185 |
| 33—Letter agreement between Pan American-Grace Airways, Inc. and National Airlines, Inc. dated November 28, 1955 | 2091 | 2186 |

Record from the United States District Court for
the Southern District of New York - Continued
Pan American World Airways, Inc. Exhibits—
Continued

34—Supplement No. 3 to Equipment Interchange Agreement between National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc. dated November 28, 1955	2093	2188
35—Letter agreement between Pan American-Grace Airways, Inc., National Airlines, Incorporated, and Pan American World Airways, Inc. dated April 16, 1957	2102	2196
36—Statement of references and cost determination set forth in financial supplement dated August 9, 1955, to the Equipment Interchange Agreement dated August 4, 1955, between National Airlines, Incorporated, Pan American World Airways, Inc., and Pan American-Grace Airways, Inc.	2106	2200
Pan American Documentary Evidence—Agreements filed with the CAB	2108	2204
37—Agreements on Interline tickets between Pan American Airways, Inc. and Pan American-Grace Airways, Inc. dated from January 26, 1932, to October 1, 1945	2113	2209
38—Letter agreement between Pan American Airways, Inc. and Pan American-Grace Airways, Inc. dated June 11, 1937	2126	2220
39—Letter agreement between Pan American-Grace Airways, Inc. and Pan American Airways, Inc. dated May 13, 1942	2128	2222
40—Letter agreement between Pan American-Grace Airways, Inc. and Pan American Airways, Inc. dated October 28, 1942	2129	2223

	Original	Print
Record from the United States District Court for the Southern District of New York—Continued		
Pan American World Airways, Inc. Exhibits— Continued		
41—Agreement between Pan American-Grace Airways, Inc. and Pan American Air- ways, Inc. dated May 25, 1944	2131	2225
42—Contract between Pan American Airways, Inc. and Pan American-Grace Airways, Inc. dated August 23, 1945	2134	2227
43—Agreement between Pan American, Pan- agra and Grace dated March 3, 1948	2140	2233
44—Letter agreement between Pan American Airways, Inc. and Pan American-Grace Airways, Inc. dated July 14, 1948	2163	2250
45—Memorandum agreement regarding ser- vices rendered and to be rendered to Panagra by the parent companies and compensation therefor between Pan American-Grace Airways, Inc., Pan American Airways, Inc. and W. R. Grace and Co., dated July 14, 1948	2168	2256
46—General Traffic and Sales Agency Agree- ment between Pan American Airways, Inc. and Pan American-Grace Airways, Inc. dated September 10, 1948	2180	2263
47—Letter agreement between Pan American Grace Airways, Inc. and Pan American World Airways, Inc. dated December 10, 1951	2213	2297
48—Letter agreement between Pan American- Grace Airways, Inc. and Pan American World Airways, Inc. dated March 6, 1956	2215	2299
49—Letter agreement between Pan American- Grace Airways, Inc. and Pan American World Airways, Inc. accepted April 25, 1956	2217	2301

Record from the United States District Court for
the Southern District of New York Continued
Pan American World Airways, Inc. Exhibits—
Continued

50—Exchange of correspondence between Pan American World Airways, Inc. and Pan American-Grace Airways, Inc. dated respectively June 26, 1957, June 3, 1957 and June 7, 1957	2220	2303
51—General Traffic Agreement between Pan American Airways, Inc. and Sociedad Colombo-Alemana de Transportes Aereos dated March 11, 1952	2227	2309
52—General Traffic and Sales Agency Agreement between Pan American Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated November 1, 1949	2242	2324
53—General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated December 3, 1954	2271	2353
54—Letter agreement between Aerovias Nacionales de Colombia, S.A. and Pan American World Airways, Inc. dated December 3, 1954	2288	2368
55—Letter agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated December 3, 1954	2291	2371
56—Interline Traffic Agreement signed by Pan American Airways, Inc. dated December 3, 1954	2292	2372

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57—Amendment No. 1 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated June 18, 1957	2300	2383
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Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

58—Amendment No. 2 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated January 30, 1958	2302	2385
59—Amendment No. 3 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated March 31, 1958	2304	2387
60—Amendment No. 4 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Aerovias Nacionales de Colombia, S.A. dated October 30, 1958	2306	2389
61—Agreement for ground services and use of ground facilities by scheduled operators between Pan American Airways, Inc. and Braniff Airways, Inc. dated April 27, 1948	2308	2391
62—Amendment No. I to Ground Facilities and Services Agreement between Pan American Airways, Inc. and Braniff Air- ways, Inc. dated September 27, 1948	2314	2399
63—Amendment II to Ground Facilities and Services Agreement between Pan Amer- ican Airways, Inc. and Braniff Airways, Inc. dated October 31, 1949	2318	2404
64—Amendment No. III to Ground Facilities and Services Agreement between Pan American Airways, Inc. and Braniff Airways, Inc. dated December 7, 1949	2321	2407
65—Amendment IV to Ground Facilities and Services Agreement between Pan Amer- ican World Airways, Inc. and Braniff Airways, Inc. dated July 20, 1950	2324	2410

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

66—Assignment agreement between Pan American World Airways, Inc. and Aeropuertos Unidos, S.A. dated April 30, 1952	2327	2412
67—Letter agreement between Pan American World Airways, Inc. and Braniff Airways, Inc. dated November 18, 1954	2328	2413
68—Amendment No. V to Ground Facilities and Services Agreement between Pan American World Airways, Inc. and Braniff Airways, Inc. dated June 20, 1957	2331	2416
69—Amendment VI to Ground Facilities and Services Agreement between Pan American World Airways, Inc. and Braniff Airways, Incorporated dated October 21, 1957	2332	2417
70—Letter agreement between Pan American Airways, Inc. and Panair Do Brasil, S.A. accepted November 16, 1943	2334	2420
71—Agreement between Pan American Airways, Inc. and Panair-Do Brasil, S.A. dated January 1, 1944	2337	2423
72—Letter agreement between Pan American Airways, Inc. and Panair Do Brasil, S.A. accepted June 28, 1944	2346	2431
73—Letter agreement between Pan American Airways, Inc. and Panair Do Brasil, S.A. accepted December 30, 1946	2351	2436
74—Letter agreement between Pan American Airways, Inc. and Panair Do Brasil, S.A. accepted October 21, 1947	2352	2437
75—Letter agreement between Panair Do Brasil, S.A. and Pan American Airways, Inc. accepted January 13, 1947	2354	2439

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

76—Letter agreement between Pan American World Airways, Inc. and Panair Do Brasil, S.A. accepted May 14, 1952	2355	2440
77—General Traffic and Sales Agency Agree- ment between Pan American World Air- ways, Inc. and Panair Do Brasil, S.A., dated January 1, 1955	2357	2441
78—Letter agreement between Pan American World Airways, Inc. and Panair Do Brasil, S.A. accepted December 28, 1955	2379	2459
79—Amendment No. 1 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Pan- air Do Brasil, S.A. dated July 1, 1957	2380	2460
80—Amendment No. 2 to General Traffic and Sales Agency Agreement between Pan American World Airways, Inc. and Pan- air Do Brasil, S.A. dated December 11, 1957	2382	2462
81—Letter from R. H. P. to C. J. Bilwiller dated August 30, 1927	2384	2463
82—Letter from R. H. Patchin to Mr. Carter dated August 31, 1927	2385	2464
83—Letter from J. T. Trippe to Harold R. Harris dated December 23, 1927	2386	2465
84—Letter from J. T. Trippe to Harold R. Harris dated December 30, 1927	2389	2468
85—Letter from Huff Daland Dusters, Inc. to Juan Trippe dated January 3, 1928	2390	2470
86—Memorandum of conversation with Dr. von Bauer by R. H. Patchin dated Jan- uary 3, 1928	2392	2472
87—Letter from J. T. Trippe to Harold R. Harris dated January 13, 1928	2395	2474
88—Letter from J. T. Trippe to Edgar N. Gott dated February 21, 1928	2397	2476

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

89—Letter from Juan Trippe to Richard F. Hoyt dated February 23, 1928	2398	2477
90—Letter from Atlantic, Gulf and Caribbean Airways, Inc. to Edgar N. Gott dated April 10, 1928	2399	2479
91—Informal memorandum report by JTT dated April 27, 1928	2403	2482
92—Memorandum by JTT dated May 7, 1928	2414	2494
93—Supreme Resolution of Peru regarding the Huff Daland Dusters, Inc. dated May 29, 1928	2418	2498
94—Agreement between the General Administration of Posts and Telegraphs of Peru and the Huff Daland Dusters, Inc. dated June 27, 1928	2420	2500
95—Advertisement for foreign airmail service by Post Office Department dated May 31, 1928	2436	2514
96—Memorandum from C. E. to H. & I. dated June 5, 1928	2440	2520
97—Memorandum to J. T. Trippe from P. E. D. Nagle dated June 26, 1928	2443	2524
98—Airmail route proposal, bond and oath by Pan American Airways, Inc. dated July 2, 1928	2445	2525
99—Memorandum to Iglehart from Patchin dated July 11, 1928	2449	2531
100—FAM contract No. 5 between United States of America and Pan American Airways, Inc. dated July 13, 1928	2450	2532
101—Acceptance of Pan American Airways, Inc. proposal to carry mails between Key West, Florida, and Cristobal Canal Zone by W. Irving Glover, Second Assistant Postmaster General, dated July 13, 1928	2457	2538

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

102—Memorandum from Robert G. Thach to J. T. Trippe dated August 1, 1928	2458	2538
103—Grace memorandum believed to be by Iglehart to Patchin dated August 3, 1928	2460	2541
104—Letter from C. E. to H. & R. dated Au- gust 6, 1928	2461	2542
105—Letter from Juan Trippe to Richard F. Hoyt dated August 14, 1928	2462	2543
106—Certificate of incorporation of Peruvian Airways Corporation dated September 4, 1928	2463	2544
107—Minutes of meeting of board of directors of Peruvian Airways Corporation held September 6, 1928	2472	2555
108—Memorandum to John D. MacGregor from J. T. Trippe dated September 10, 1928	2475	2558
109—Letter from J. T. Trippe to John D. Mac- Gregor dated September 10, 1928	2478	2562
110—Letter from J. T. T. to Richard F. Hoyt dated September 11, 1928	2480	2564
111—Letter from J. T. T. to R. B. Bevier dated September 11, 1928	2481	2565
112—Letter from J. T. Trippe to William F. Cogswell dated September 20, 1928	2482	2566
113—Letter from W. Irving Glover to Trippe dated October 4, 1928	2483	2567
114—Letter from R. H. Patchin to Richard F. Hoyt dated November 23, 1928	2484	2568
115—Change of route of FAM contract No. 5 announced by W. Irving Glover, Sec- ond Assistant Postmaster General, dated November 24, 1928	2485	2569
116—Letter from J. T. T. to C. V. Whitney dated November 27, 1928	2486	2569

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

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117—Memorandum for Mr. Hoyt from R. H. Patchen (sic) dated November 27, 1928	2487	2571
118—Letter from Peruvian Airways Corporation by H. R. Harris to Peruvian Airways Corporation, New York, dated December 5, 1928	2491	2575
119—Memorandum re operating history of Pan American Airways, Inc. by J. T. T. dated December 22, 1928	2494	2578
120—Letter to Henry Breckinridge from J. T. T. dated December 24, 1928	2500	2584
121—Letter to H. Case Willecox from J. T. Trippe dated January 5, 1929	2504	2588
122—Memorandum to Valverde from Patchin dated January 12, 1929	2508	2593
123—Letter to the representative of Huff Daland Dusters, Inc. from Postal and Telegraph Administration of Peru, A. S. Salazar, Secretary General, dated January 19, 1929	2509	2594
124—Memorandum re tentative estimate of proposed airway service between Colon, C.A. and Santiago, Chile, by Walter P. Jacob dated January 23, 1929	2510	2595
125—Pan American Airways, Inc. memorandum to J. T. Trippe from Walter Phelps Jacobs, dated January 25, 1929	2523	2608
126—Letter to Pan American Airways, Inc. from SCADTA dated January 28, 1929	2524	2609
127—Advertisements for foreign airmail service Post Office Department from Cristobal Canal Zone to Santiago, Chile, dated January 31, 1929	2525	2610
128—Pan American Airways, Inc. memorandum to R. H. Patchin from Walter P. Jacob dated February 19, 1929	2529	2615

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

129—Department of State press release re aircraft facilities in United States, Panama Canal Zone, and Colombia (Kellogg-Olaya Agreement) dated Feb- ruary 23, 1929	2530	2616
130—Airmail proposal, bond and oaths by Pan American-Grace Airways, Inc. dated February 26, 1929	2532	2618
131—Letter to the Postmaster General from Pan American-Grace Airways, Inc. dated March 1, 1929	2536	2622
132—Post Office Department press release re award to Pan American-Grace Airways of mail contract between Cristobal Canal Zone and Santiago, Chile, dated March 2, 1929	2537	2623
133—Acceptance of proposal of Pan American- Grace Airways, Inc. to carry mails be- tween Cristobal, Canal Zone and San- tiago, Chile, by Harry S. New, Post- master General, dated March 2, 1929	2540	2625
134—FAM Contract No. 9 between United States of America and Pan American- Grace Airways, Inc. dated March 2, 1929	2541	2625
135—Memorandum on behalf of Pan Amer- ican-Grace Airways, Inc. in the matter of the protest against this award of foreign airmail contract No. 9 dated March 26, 1929	2548	2633
136—Telegram to Pan American-Grace Air- ways from Irving Glover, Second As- sistant Postmaster General, dated May 3, 1929	2600	2680

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

137—Post Office Department press release re award of mail contract to Pan Amer- ican-Grace Airways, Inc. dated May 3, 1929	2601	2680
138—Letter to R. E. Hoyt from J. D. Mac- Gregor dated May 9, 1929	2602	2681
139—Memorandum to the directors of Pan American-Grace Airways, Inc. from J. D. MacGregor attached to letter to Hoyt from MacGregor dated May 9, 1929	2603	2682
140—Order signed by W. Irving Glover, Sec- ond Assistant Postmaster General, dated August 20, 1929	2614	2692
141—Letter to Walter F. Brown, Postmaster General, from Pan American Airways, Inc. dated October 24, 1929	2615	2692
142—Letter to Pan American Airways, Inc. from W. Irving Glover, Second As- sistant Postmaster General, dated Oc- tober 28, 1929	2619	2695
143—Traffic agreement between Pan American Airways, Inc., Pan American-Grace Airways, Inc. and SCADTA dated February 28, 1930	2620	2696
144—Letter to J. T. Trippe from E. E. W. dated May 2, 1930	2628	2701
145—Cable to MacCracken, O'Neill from Bunge Bilbao dated May 14, 1930	2632	2705
146—Letter to Pan American Airways, Inc. from James D. Summers dated June 4, 1930	2636	2707
147—Memo to J. T. Trippe from Pan Amer- ican-Grace Airways, Inc. dated June 12, 1930	2639	2710

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

148—Letter to Walter F. Brown from Pan American-Grace Airways, Inc. dated June 18, 1930	2641	2712
149—Memorandum by MacCracken, Jr. and J. T. Trippe dated July 22, 1930	2645	2716
150—Memorandum in regard to the proposed acquisition by Aviation Corporation of the Americas of the assets of New York, Rio & Buenos Aires Line, Inc. prepared by Root, Clark, Buckner & Ballantine, counsel for Pan American, dated July 28, 1930	2646	2718
151—Letter to Root, Clark, Buckner & Ballantine from John Lord O'Brian, Assistant Attorney General, dated August 1, 1930	2687	2749
152—Post Office advertisement for foreign airmail service between Paramaribo and Santos dated August 20, 1930	2688	2750
153—Contract for foreign airmail service route No. 10 between United States of America and Pan American Airways, Inc. dated September 24, 1930	2696	2760
154—Extension of service and agreements for foreign airmail route No. 10, agreement between the United States of America and Pan American Airways, Inc., dated October 15, 1931	2709	2774
155—Memorandum to directors, Pan American-Grace Airways, Inc. from J. D. MacGregor dated September 26, 1930	2715	2782
156—Letter to Pan American Airways, Inc. from E. R. White, Director, Post Office Department, dated December 13, 1930	2721	2787

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

157—Law No. 8 of 1931 of Colombia dated January 9, 1931	2722	2788
157A—Memorandum to Trippe from Evan E. Young dated March 6, 1931	2733	2797
158—Letter to the Postmaster General from J. T. Trippe dated April 7, 1931	2735	2799
159—Letter to the Postmaster General from J. T. Trippe dated April 7, 1931	2737	2800
160—Letter to the Postmaster General from J. T. Trippe dated April 7, 1931	2739	2803
161—Letter to J. T. Trippe from Francis White dated April 9, 1931	2740	2804
162—Letter to President of Pan American from Washington Representative (Na- gle) dated June 17, 1931	2741	2805
163—Letter to Walter F. Brown from Thomas B. Doe dated July 2, 1931	2744	2808
164—Letter to Thomas B. Doe from Walter F. Brown dated July 7, 1931	2746	2810
165—Cable to J. T. Trippe from Tietjen dated July 10, 1931	2748	2811
166—Telegram to Tietjen from Trippe dated July 11, 1931	2749	2812
167—Letter to President from J. T. Trippe dated September 4, 1931	2750	2813
168—Agreement between Uraba, Medellin & Central Airways, Inc. and Gonzalo Mejia dated September 10, 1931	2753	2815
169—Clipping from the New York Times dated December 12, 1931	2759	2819
170—Translation of deed of assignment of the Mejia Concession to Uraba, Medellin & Central Airways, Inc. dated January 11, 1932	2760	2821
171—Letter to Harold R. Harris from Geo. L. Rihl dated December 24, 1933	2770	2830

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Record from the United States District Court for the Southern District of New York—Continued		
Pan American World Airways, Inc. Exhibits—Continued		
172—Letter to Geo. L. Rihl from H. R. Harris dated December 30, 1933	2772	2833
173—Memorandum of conference with Francis White by H. J. F. dated February 23, 1934	2774	2836
174—Letter to A. Garni from Harold Roig dated March 18, 1935	2780	2840
175—Letter to Chief of Engineering at New York from Pan American Operations Manager, Caribbean, Miami, dated June 19, 1935	2785	2844
176—Letter to J. D. MacGregor from H. R. Harris dated November 28, 1936	2787	2848
177—Confidential memorandum re airmail service U.S.A. to Buenos Aires via west coast of South America by Garni attached to letter from Harris to MacGregor dated November 28, 1936	2792	2855
178—Memorandum re extension of FAM 9 through Bolivia to the Argentine attached to letter from Harris to MacGregor dated November 28, 1936	2796	2861
179—Letter to J. D. MacGregor from H. R. Harris dated December 7, 1936	2803	2867

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180—Memorandum to Vice President Young from M. J. Rice dated June 3, 1937	2805	2869
181—Letter from M. J. Rice to Evan E. Young dated June 16, 1937	2806	2870
182—Letter to Evan E. Young from M. J. Rice dated June 17, 1937	2807	2872
183—Letter to J. D. MacGregor from H. R. Harris dated August 7, 1937	2811	2877

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

184—Agreement between Pan American Grace Airways, Inc. and Compania de Aviacion Pan American Argentine, S.A. dated September 1, 1937	2813	2880
185—Cable to Roig from Garni dated October 14, 1937	2817	2884
186—Minutes of adjourned special meeting of Board of directors of Pan American Grace Airways, Inc. held January 27, 1938	2822	2890
187—Exhibit B memorandum by Rihl dated January 27, 1938	2826	2893
188—Memorandum for A. Garni from J. D. MacGregor dated April 29, 1938	2830	2895
189—Letter to A. Garni from Harllee Branch, Second Assistant Postmaster General, dated June 30, 1938	2833	2899
190—Letter to Evan E. Young from M. J. Rice dated November 11, 1938	2834	2900
191—Letter to Trippe from von Bauer, undated	2838	2905
192—Memorandum of conference relating to proposed agreement between Pan American Airways Corporation and W. R. Grace and Company on February 14, 1939, by Henry J. Friendly	2840	2908
193—Translation of confidential memorandum by A. Villegas Restrepo dated June 13, 1939	2842	2910
194—Memorandum of telephone conversation between Mr. Latchford and Mr. Young by E. E. Y. dated July 15, 1939	2844	2913
195—Letter to P. P. von Bauer from Evan E. Young dated August 7, 1939	2845	2914
196—Letter to President, Executive, New York, from Evan E. Young dated September 6, 1939	2846	2915

Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

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197—Letter to Evan E. Young from F. Powers dated September 28, 1939	2848	2917
198—Letter to Thomas Burke from George L. Rihl dated November 13, 1939	2852	2923
199—Letter to Rihl from Thomas Burke dated November 18, 1939	2853	2923
200—Letter to Ellis O. Briggs from George L. Rihl dated December 16, 1939	2854	2924
201—Letter to Martin del Corral from George L. Rihl dated January 18, 1940	2859	2931
202—Letter to George L. Rihl from Jose Joa- quin Castro M. dated January 23, 1940	2861	2933
203—Letter to Juan T. Trippe from George L. Rihl dated January 25, 1940	2862	2934
204—Memorandum by J. T. Trippe dated Jan- uary 29, 1940	2870	2943
205—Minutes of regular meeting of executive committee of Pan American Airways, Inc. dated May 14, 1940	2872	2945
206—Minutes of regular meeting of executive committee of Pan American Airways, Inc. dated May 24, 1940	2877	2948
207—Minutes of regular meeting of executive committee of Pan American Airways, Inc. dated May 28, 1940	2878	2948
208—Letter to J. T. Trippe from M. J. Rice dated June 8, 1940	2879	2949
209—Memorandum of conference with the Civil Aeronautics Authority reference SCADTA by Cooper of Pan American, dated June 13, 1940	2880	2950
210—Minutes of adjourned regular meeting of executive committee of Pan American Airways, Inc. dated November 12, 1940	2883	2953
211—Minutes of regular meeting of executive committee of Pan American Airways, Inc. dated November 19, 1940	2884	2954

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Record from the United States District Court for
the Southern District of New York—Continued
Pan American World Airways, Inc. Exhibits—
Continued

212—Memorandum of telephone conversation between Messrs. Rihl and Harding by G. L. R. dated July 10, 1941	2885	2954
213—Memorandum to President, Executive, New York, from Evan E. Young dated July 15, 1941	2886	2956
214—Telegram to Panair, Young, New York, from Cauby dated July 15, 1941	2888	2958
215—Letter to C. V. Whitney from D. Stewart Iglehart dated July 18, 1941	2889	2959
216—Letter to Civil Aeronautics Board from W. R. Grace and Co. dated July 21, 1941	2890	2960
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| 288—Pan American Exhibit No. P-6 and 7 in CAB docket 779, passengers carried from Buenos Aires to points indicated 1929-1942 | 3064 | 3144 |
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307—CAB order No. E-13631 dated March 19, 1959	3150	3235
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309—Letter to J. T. Trippe from Donald W. Nyrop, Chairman, Civil Aeronautics Board, dated November 9, 1951	3158	3246
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341—Memorandum to the Directors of Pan American-Grace Airways, Inc. from J. D. MacGregor dated March 6, 1931	3317	3402
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363—Letter to Panagra, New York, from J. E. Muhlfield dated March 25, 1941	3399	3483
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365—Letter to Douglas Campbell from H. J. R. dated June 4, 1941	3403	3489
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368—Memorandum re work performed for Pan American-Grace Airways, Inc. by Pan American Airway System public relations department (New York) dated about July 1, 1941	3411	3499
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371—Letter to Pan American-Grace Airways, Inc. from H. R. Harris dated January 29, 1942	3425	3512
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[fol. 1] [File endorsement omitted]

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

Civil Action No. 90-239

UNITED STATES OF AMERICA, Plaintiff,

v.

PAN AMERICAN WORLD AIRWAYS, INC., W. R. GRACE AND
COMPANY, and PAN AMERICAN-GRACE AIRWAYS, INC.,
Defendants.

COMPLAINT—Filed January 11, 1954

The United States of America, by its attorneys, acting under the direction of the Attorney General of the United States, brings this action against the defendants and complains and alleges as follows:

I

Jurisdiction and Venue

1. This complaint is filed and the jurisdiction of this Court is invoked under Section 4 of the Act of Congress of July 2, 1890 (c. 647, 26 Stat. 209, 15 U.S.C. 4), as amended, entitled "An Act to Protect Trade and Commerce Against Unlawful Restraints and Monopolies," commonly known as the Sherman Act, to obtain civil relief against said defendants because of their violations, as hereinafter alleged, of Sections 1, 2, and 3 of said Act.

2. Each of the defendants transacts business and is found within the Southern District of New York.

II

Description of Defendants

3. Defendant Pan American World Airways, Inc. is a corporation organized in 1927 under the laws of the State

of New York as the Pan American Airways, Inc. Its [fol. 2] corporate name was changed to the present one in 1950. From 1928 until December, 1949, this defendant was a wholly owned subsidiary of a corporation, organized in 1928 under the laws of the State of Delaware as the Aviation Corporation of the Americas, which name was changed in 1931 to Pan American Airways Corporation. Pan American Airways Corporation was a holding company having various subsidiaries, including foreign corporations, engaged in the transportation by air of persons, property, and mail throughout the world. In December, 1949, Pan American Airways, Inc. acquired all of the assets and assumed all of the liabilities of Pan American Airways Corporation. Defendant Pan American World Airways, Inc. directly operates routes in air transportation of persons, property, and mail between the United States and various points in Europe, Asia, Africa, Australia, and South America. The term "Pan American" is hereinafter used in this complaint to refer to defendant Pan American World Airways, Inc., and to Pan American Airways, Inc., Pan American Airways Corporation, and Aviation Corporation of the Americas as the meaning may require. Defendant Pan American has its principal offices at 135 East 42nd Street, New York, New York.

4. Defendant W. R. Grace and Company, hereinafter called Grace, is a corporation organized in 1899 under the laws of the State of Connecticut. Defendant Grace is a holding corporation having subsidiaries which engage in numerous aspects of industry, trade and commerce, including steamship transportation between the United States and Latin America. Defendant Grace owns all of the capital stock of Grace Line, Inc., which operates steamship lines for the transportation of persons, property and mail between ports of the United States and the west coast of South America. Defendant Grace has its principal office at 7 Hanover Square, New York, New York.

[fol. 3] 5. Defendant Pan American-Grace Airways, Inc., hereinafter called Panagra, is a corporation organized in 1929 under the laws of the State of Delaware. Defendant Panagra is engaged in air transportation of persons, prop-

erty and mail over routes between the Canal Zone and Buenos Aires, Argentina, via the countries on the west coast of South America. It is wholly owned by defendants Pan American and Grace, each of which owns 50 per cent of the stock thereof. The principal office of defendant Panagra is located at 135 East 42nd Street, New York, New York.

III

The Trade and Commerce Involved

6. Prior to 1928 virtually all transportation between the United States and the nations of Latin America was conducted by steamship. Grace Line, Inc., the wholly owned subsidiary of defendant Grace, was at that time and has remained until the filing of this complaint the largest company engaged in steamship transportation between the United States and countries located on the west coast of South America. Grace Line, Inc. operates steamship routes from New York City southward along the Atlantic coast of North America through the Caribbean Sea to ports located on the north coast of South America, and through the Panama Canal to ports located on the west coast of South America. In 1950 Grace Line, Inc. transported about 90 per cent of the passengers travelling by liner service over the steamship trade route between United States Atlantic ports and the west coast of South America and about 60 per cent of the total commercial cargo carried in all liner service over said route. Over this trade route, Grace Line, Inc. transports virtually all of the passengers and commercial cargo carried in United States flag ships. In addition to its dominant position through Grace Line, Inc. in transportation between the countries on the west coast of South America and between those countries and the United [fol. 4] States, defendant Grace occupies an important position in Latin American trade through a banking subsidiary and numerous other subsidiaries located principally in South America. For nearly 100 years defendant Grace and its predecessors have been engaged in numerous phases of industry, trade and commerce in the countries located on the west coast of South America.

7. In 1928 air transportation service over local and limited trunk line routes was being furnished in a number of South American countries by carriers other than United States flag air carriers. Such service was fragmentary and did not reach north of South America. The potentialities of air transportation between the United States and Latin America had for some years attracted groups and individuals interested in the development of aviation. In 1928 Pan American Airways Corporation (then called the Aviation Corporation of the Americas) was formed to effectuate the acquisition of a number of aviation companies for the purpose of acquiring, developing and operating air routes from the United States to the Caribbean, Central America, the Canal Zone, and down the east coast of South America to Rio de Janeiro and Buenos Aires. Pan American rapidly acquired a dominant position in air transportation between the United States and Latin America by the development of new routes and by the acquisition of competing trunk and local air line companies serving countries on the east coast of South America.

8. The extensive system of Latin American air transportation operated by defendant Pan American comprises over 60,000 route miles certificated by the Civil Aeronautics Board. It extends from points in the United States to Latin America, including the Caribbean Sea, Mexico, and Central America to the Canal Zone, and by way of the north and east coasts of South America to Rio de Janeiro and Buenos Aires, linking the United States with the principal [fol. 5] traffic centers in Latin America. Aside from its 50 per cent ownership in Panagra, and its ownership of stock in Aerovías Nacionales de Colombia, which operates primarily in Colombia, Pan American does not engage in air transportation between countries located on the west coast of South America.

9. In 1928 Pan American acquired an option on a Peruvian air mail contract and concession which had been secured by an American transportation company operating in Peru. Operating rights in Peru were essential to the establishment of a west coast air route paralleling and competitive with the established west coast steamship routes

of Grace's subsidiary, Grace Line, Inc., whose steamships at that time provided most of, if not virtually all, the transportation connecting the countries on the west coast of South America with each other and with the United States. In 1929 Pan American and Grace, pursuant to agreement hereinafter alleged, formed Panagra and have since participated equally in its control. Panagra's line comprises over 10,000 route miles certificated by the Civil Aeronautics Board. It extends from its terminal at the Canal Zone southward through the principal traffic centers of countries located on the west coast of South America and across the Andes to Buenos Aires, Argentina.

10. Until about 1946, Pan American was the only United States flag air carrier operating scheduled service between the United States and the countries on the north and east coasts of South America. For many years it has dominated and at the present time continues to dominate air transportation between the United States and South America. About nine-tenths of all passengers travelling by United States flag air carriers between points in the Eastern coastal states of the United States and countries on the north and east coasts of South America are carried by Pan American. Defendants Pan American and Panagra, connecting at the Canal Zone, carry about four-fifths of the passengers travelling by United States flag air carriers between points in the Eastern coastal states of the United States and countries on the west coast of South America, including passengers travelling over the west coast route to Buenos Aires. Foreign flag carriers, during the twelve-month period ending June 1951, transported less than one-fourth of the air passenger traffic between the United States and the Canal Zone and between the United States and South America.

11. Pursuant to contracts, agreements, and understandings, hereinafter alleged, Panagra does not serve any points served by Pan American on its east coast route, except that Pan American and Panagra have common terminals at the Canal Zone and at Buenos Aires. A substantial part of the traffic of both Pan American and Panagra handled at Buenos Aires is through traffic to or from the United States. The distance from United States terminals to

Buenos Aires is substantially less by way of Panagra's west coast route than by way of Pan American's east coast route. Prior to the passage of the Civil Aeronautics Act in 1938, Panagra never operated its own air transportation service north of the Canal Zone, and since that time Panagra has never sought from the Civil Aeronautics Board authority for the operation by it of such transportation service. Most of the traffic which Panagra handles at the Canal Zone originates in or is destined to the United States. This traffic is dependent for through United States service upon operations furnished by Pan American between the United States and the Canal Zone.

12. Panagra's route along the west coast of South America serves many of the ports and the principal cities in the countries served by the steamship routes of Grace Line, Inc., which link the Atlantic coast of the United States to ports on the west coast of South America. Both Panagra [fol. 7] and Grace Line, Inc. carry a substantial number of intermediate passengers travelling within or between the countries served by Panagra. Defendant Panagra and Grace Line, Inc. are potentially competitive with each other in the transportation of passengers, property and mail.

13. The growth of air transportation of persons, property and mail in competition with water transportation to Latin America has been extremely rapid. During the twelve months ending June 30, 1951, air transportation accounted for about 70 per cent of the total sea and air passenger traffic between the United States and the Canal Zone and between the United States and South America. In that year air transportation accounted for about one-half of the passenger travel between the United States and the Canal Zone, about 85 per cent between the United States and Colombia, about 75 per cent between the United States and Venezuela, about 70 per cent between the United States and Brazil, about 70 per cent between the United States and Argentina, and about 75 per cent between the United States and other countries of South America. The total ton miles of express and freight carried by United States flag air carriers between the United States and South America

increased from approximately 10,800,000 ton miles in 1946 to approximately 29,000,000 ton miles in 1951.

14. During the year 1949, Pan American carried approximately 700,000 air passengers over its Latin American routes. Its total operating revenue for that year from its Latin American air line operations amounted to about \$65,500,000, of which about \$40,500,000 was revenue from passengers, about \$15,800,000 revenue from United States and foreign air mail, and about \$9,200,000 from cargo and other sources. During the same period Panagra carried about 90,000 passengers (including intermediate traffic between and within countries in South America as well [fol. 8] as passengers travelling to and from the United States) and its total operating revenue amounted to about \$16,800,000 of which about \$10,800,000 was revenue from passengers, about \$4,400,000 was revenue from foreign and United States air mail, and about \$1,600,000 from cargo and other sources. During the year 1950, Grace Line, Inc. carried a total of about 4,000 passengers on its steamship line operating on the through route between the United States Atlantic ports and the west coast of South America (excluding intermediate South American traffic). During the same year Grace Line, Inc. carried about 600,000 tons of cargo over this route.

IV

Offenses Charged

15. Beginning in or about 1928 and continuing up to the date of the filing of this complaint, the defendants have been parties to and have operated under contracts, and have been engaged in a combination and conspiracy to restrain the aforesaid trade and commerce in the transportation of passengers, property and mail, and to monopolize the aforesaid transportation by air of passengers, property and mail, and during said period have attempted to monopolize and have monopolized the aforesaid transportation by air of passengers, property and mail, in violation of Sections 1, 2 and 3 of the Act of Congress of July 2, 1890 (c. 647, 26 Stat. 209, 15 U.S.C. 4), as amended, entitled "An Act to Protect Trade and Commerce Against Unlawful

Restraints and Monopolies," commonly known as the Sherman Act. Defendants threaten to continue and will continue such offenses unless the relief hereinafter prayed for is granted. The aforesaid contracts, combination, conspiracy, attempt to monopolize and monopolization, and certain of the acts, agreements and understandings which formed a part thereof and were used in their effectuation, are hereinafter more fully set forth and described.

[fol. 9] 16. For the purpose of obtaining and maintaining domination and control by Grace and Pan American of air transportation between the United States and countries along the west coast of South America and to exclude the establishment of an independent air line which would be competitive with the parallel steamship route of Grace Line, Inc., or with Pan American, Pan American and Grace in 1928 entered into an agreement for the establishment of Panagra. Under the agreement defendant Panagra was to establish and operate an air line on the west coast of South America and was to be jointly owned and controlled in equal shares by Pan American and Grace.

17. Defendant Panagra was established thereafter in January 1929 and 50 per cent of its stock was transferred to Pan American and 50 per cent to Grace. Panagra acquired the Peruvian rights and concessions described in Paragraph 9 above from Pan American pursuant to the agreement described in Paragraph 16 above, and in 1929 began operations as an air carrier on the west coast of South America. In May, 1929 Panagra commenced operations between the Canal Zone and Mollendo, Peru. In October, 1929 its operations were extended to Buenos Aires, Argentina, and Panagra has since that time operated an air line from the Canal Zone, along the west coast of South America, and across the Andes to Buenos Aires, Argentina.

18. As a part of the understanding between Pan American and Grace in the formation of Panagra, it was agreed that the sphere of operations of Panagra would be confined to the west coast of South America and that Pan American would operate air routes on the east coast of South America and between the United States and the Canal Zone. Pursuant to this unlawful agreement and understanding,

Panagra has refrained from acquiring or applying for operating rights or concessions and from operating an air line on the east coast of South America and Pan American [fol. 10] has refrained from applying for operating rights and from operating an air line along the west coast of South America. For its connections at the Canal Zone and for the transportation of its traffic between the United States and the Canal Zone, defendants made and have kept Panagra dependent on Pan American.

19. The general purpose to maintain Panagra under the joint ownership and control of Pan American and Grace has been continuously adhered to. Defendants Pan American and Grace have entered into agreements and understandings for the management and conduct of the affairs of Panagra. Pursuant to such agreements and understandings, the management and operation of Panagra have been kept under the control of Pan American and Grace.

20. Pursuant to such agreements and understandings and by virtue of the control exercised by defendants Pan American and Grace, defendant Panagra has been prevented from establishing and maintaining research, procurement, advertising, sales and commercial services in the United States independently of Pan American, and has been prevented from establishing and maintaining facilities, sales, and commercial representation in South America independently of Grace.

21. Pursuant to their unlawful agreements and understandings, Pan American and Grace each has retained ownership of 50 per cent of the voting stock of Panagra, and each has retained an equal number of representatives on Panagra's Board of Directors. Because of this control, Panagra has been and is required to adhere and has adhered to the unlawful agreements between Pan American and Grace and to the unlawful purposes and objectives of Pan American and Grace, or either of them.

[fol. 11] 22. By virtue of their equal division of control, Pan American and Grace each has had and now has the power of preventing the exercise of Panagra's corporate powers and functions and each has exercised this power to

block and prevent any action by Panagra considered by Grace or Pan-American to be contrary or detrimental to its own particular interests. As a consequence, the development of Panagra's routes and operations in South America and their extension to the United States have been blocked, the acquisition of flight equipment and the development of ground facilities by Panagra have been retarded and prevented, and Panagra has been impeded and restrained from developing and expanding competitively, from rendering improved and competitive transportation service and from otherwise independently exercising lawful competitive practices.

23. Throughout the period covered by this complaint, Pan American, in accordance with its unlawful agreements and understandings with Grace to form Panagra and to divide and allocate the areas of air transportation, has used its 50 per cent control over Panagra to block and prevent Panagra from securing requisite authority from the Civil Aeronautics Board to extend its route from the Canal Zone to the United States. Pan American has also used its 50 per cent control over Panagra to block and prevent Panagra from effectuating any agreement with any air line other than Pan American or a designee of Pan American to establish, extend, or improve through air transportation service between the United States and South America. Such restraining action has been persisted in by Pan American despite repeated expressions by the Civil Aeronautics Board that it would be in the interest of the proper development of air transportation for defendant Panagra to be freed from such restraints. So long as Pan American and Grace retain the power to control [fol. 12] action by Panagra through their respective 50 per cent stock ownership, Panagra's development and operations will be substantially and unreasonably restrained.

24. During the period covered by this complaint, defendants Pan American and Panagra, in furtherance of the unlawful purposes hereinbefore alleged, have acquired the stock or assets of, or other interests in, competing lines operating in Latin American countries. Pan American and Panagra (controlled by Pan American and Grace) have used the dominant position and power attained by the

defendants in air transportation to impede and restrain the establishment and development of competition in air transportation between the United States and Latin America by United States flag air lines authorized in and after 1946 by the Civil Aeronautics Board to develop and engage in such transportation. Pan American and Panagra have engaged in restrictive practices to restrain and impede such air lines from utilizing established airports, terminals, communications and other facilities in Latin American countries necessary to the inauguration and development of such air transportation.

V

Effects of the Violations

25. The aforesaid acts, combination, conspiracy, contracts, agreements, understandings, and concert of action hereinabove alleged have had, as intended by the defendants, the following effects among others:

(a) Defendants unlawfully acquired the power to monopolize and restrain air transportation between the United States and Latin America;

[fol. 13] (b) competition in air transportation between the United States and Latin America has been restrained, suppressed and prevented;

(c) competition in transportation by air with transportation by water between the United States and Latin America has been restrained, suppressed and prevented;

(d) defendants have arbitrarily divided and allocated between and among themselves air transportation between the United States and South America;

(e) trade and commerce with foreign nations has been dominated, controlled and monopolized.

Prayer

Wherefore the Plaintiff Prays:

1. That the Court adjudge and decree that the defendants have contracted, combined and conspired in restraint

of the trade and commerce hereinabove described, have combined and conspired to monopolize, have attempted to monopolize and have monopolized that trade and commerce, in violation of Sections 1, 2 and 3 of the Sherman Act.

2. That the Court adjudge and decree that the stockholdings in and control of defendant Panagra by defendants Pan American and Grace have operated so as to restrain and to monopolize trade and commerce, as hereinabove described, in violation of Sections 1, 2 and 3 of the Sherman Act.

3. That the Court order and direct defendants Pan American and Grace to divest themselves of all stockholdings and other interests in defendant Panagra, held directly or through subsidiaries, under terms and conditions [fol. 14] which will accomplish effective divorcement and complete elimination of control of the operation and management of defendant Panagra from defendants Pan American and Grace.

4. That the defendants, and each of them, be perpetually enjoined from combining and conspiring to restrain or monopolize, or from monopolizing or attempting to monopolize the trade and commerce hereinbefore alleged, and from engaging in any practice, relationship, contract, agreement or course of conduct having the purpose or effect of continuing or renewing any of the violations hereinbefore alleged.

5. That the plaintiff have such other and further relief as the nature of the case may require and the Court may deem just and proper.

6. That plaintiff recover the costs of this suit.

Herbert Brownell, Jr., Attorney General, Stanley N. Barnes, Assistant Attorney General, James E. Kilday, Special Assistant to the Attorney General, Frank F. Vesper, Special Assistant to the Attorney General, J. Edward Lumhard, United States Attorney, John Guandolo, Trial Attorney.

[fol. 14a] [File endorsement omitted]

[fol. 15]

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

[Title omitted]

ANSWER OF W. R. GRACE & Co.—Filed April 27, 1954

W. R. Grace & Co., one of the above named defendants, by its attorneys, Cahill, Gordon, Reindel & Ohl, answers the complaint herein as follows:

First Defense

1. Admits that the complaint is filed under Section 4 of the Sherman Act, but denies that W. R. Grace & Co. (hereinafter "Grace") is engaged in any violations of Sections 1, 2 and 3 of the Sherman Act, as alleged in Paragraph "1" of the complaint.

2. Admits the allegations contained in Paragraph "2" of the complaint.

3. Admits upon information and belief the allegations contained in Paragraph "3" of the complaint.

4. Admits that Grace is a corporation duly organized in 1899 under the laws of the State of Connecticut and has [fol. 16] its principal office located at 7 Hanover Square, New York, N. Y.; that Grace has subsidiaries which engage in various aspects of industry, trade and commerce including Grace Line, Inc., all of whose capital stock is owned by Grace; that Grace Line, Inc. operates a steamship route, among others, for the transportation of persons, property and mail between the United States and the west coast of South America; except as hereinabove admitted, denies each and every allegation contained in Paragraph "4" of the complaint.

5. Admits the allegations contained in Paragraph "5" of the complaint.

6. Admits that prior to 1928 substantially all transportation between the United States and Latin America was

conducted by steamship; that Grace Line, Inc. in 1928 and thereafter was and continues to be one of the largest companies engaged in steamship transportation between the United States and the west coast of South America; that Grace Line, Inc. operates a steamship route, among others, from New York City southward along the Atlantic Coast of North America through the Caribbean Sea to ports located on the north coast of South America and through the Panama Canal to ports located on the west coast of South America; that in 1950 Grace Line, Inc. transported approximately 90% of the passengers traveling by liner service between the United States Atlantic ports and the west coast of South America and approximately 60% of the total commercial cargo in liner service between said points and transports substantially all of the passengers and commercial cargo in United States flag ships between these points; that Grace occupies an important position in Latin American trade through its various subsidiaries some of which are located in South America; that for many years Grace has been engaged in various phases of industry, trade and commerce in countries located on the west coast of South America; except as hereinabove admitted, [fol. 17] denies each and every allegation of Paragraph "6" of the complaint.

7. Admits upon information and belief the allegations contained in Paragraph "7" of the complaint.

8. Admits upon information and belief the allegations contained in Paragraph "8" of the complaint; except denies knowledge or information sufficient to form a belief as to the truth of the allegation that the extensive system of Latin American air transportation operated by Pan American comprises over 60,000 route miles certificated by the Civil Aeronautics Board (the term "Pan American" is used in this answer to refer to Pan American World Airways, Inc., Pan American Airways, Inc., Pan American Airways Corporation and Aviation Corporation of the Americas as the meaning may require).

9. Avers that the Peruvian Government by Supreme Resolution on May 28, 1928 granted Huff-Daland Dusters,

Inc., a corporation organized under the laws of the State of Louisiana, permission to engage in transportation by air of mail, cargo and passengers between Peru and the United States; that thereafter Huff-Daland Dusters, Inc. pursuant to permission granted by the Peruvian Government in November, 1928, transferred the rights granted to it under said Supreme Resolution to Peruvian Airways Corporation, an American corporation owned by Grace and Pan American each holding 50% of its outstanding capital stock; that Grace and Pan American each owned a one-half interest in Peruvian Airways Corporation; that Grace and Pan American organized Pan American-Grace Airways, Inc. (hereinafter "Panagra") in January, 1929 under the laws of the State of Delaware; that Grace and Pan American each subscribed to 50% of Panagra's stock which they have held to date and each had and continues to have equal representation on the Board of Directors of Panagra; that Panagra succeeded to all the rights assigned to Peruvian Airways Corporation by Huff-Daland Dusters, Inc.; that [fol. 18] Panagra's unduplicated weighted average route mileage certified by the Civil Aeronautics Board is approximately 6,000 miles and extends from its terminal at the Canal Zone southward through the principal traffic centers of countries located on the west coast of South America and across the Andes to Buenos Aires, Argentina; that said routes were duly certificated in 1940 by the Civil Aeronautics Board issuing a certificate of public convenience and necessity under the "grandfather" clause of the Civil Aeronautics Act of 1938 (49 U. S. C. Sec. 401(e)); that under a Through Flight Agreement with Pan American dated July 31, 1946, approved by the Civil Aeronautics Board on May 5, 1947 (Order Serial No. E-570) and again on May 4, 1950 (Order Serial No. E-4130) Panagra's aircraft operate over Pan American's route between the Canal Zone and Miami to provide direct one-plane service between Buenos Aires and Miami; except as hereinabove admitted, denies each and every allegation contained in Paragraph "9" of the complaint.

10. Admits upon information and belief the allegations contained in Paragraph "10" of the complaint.

11. Avers that Panagra's certificated routes do not duplicate those of Pan American in any part except that both have common terminals at the Canal Zone and at Buenos Aires; that a part of the traffic of both Panagra and Pan American handled at Buenos Aires is through traffic to or from the United States; that the distance from United States terminals to Buenos Aires is less by way of Panagra's west coast route than by way of Pan American's east coast route as presently operated; that most of the traffic which Panagra handles at the Canal Zone originates in or is destined to the United States; that prior to 1938 Panagra did not engage in air transportation north of the Canal Zone; that Panagra has not filed an application with the Civil Aeronautics Board for authority to operate air transportation north of the Canal Zone; that under the Through Flight Agreement referred to in Paragraph "9" [fol. 19] hereof and with the approval of the Civil Aeronautics Board, Panagra's aircraft operate over Pan American's route between the Canal Zone and Miami to provide direct one-plane service between Buenos Aires and Miami; except as hereinabove admitted, denies each and every allegation contained in Paragraph "11" of the complaint.

* 12. Denies each and every allegation contained in Paragraph "12" of the complaint except admits that Panagra serves some of the ports and principal cities served by Grace Line, Inc. and that both Panagra and Grace Line, Inc. carry intermediate passengers traveling within or between some of the countries served by Panagra.

13. Admits upon information and belief the allegations contained in Paragraph "13" of the complaint except denies each and every allegation contained in the first and last sentence of said paragraph "13".

14. Admits upon information and belief the allegations contained in Paragraph "14" of the complaint except denies upon information and belief that Panagra's total operating revenue for the year 1949 amounted to \$16,800,000 and that of this amount \$4,400,000 was revenue from foreign and United States air mail and avers that such revenues amounted to \$15,035,000 and \$2,645,000, respectively.

15. Denies each and every allegation contained in Paragraph "15" of the complaint.

16. Denies each and every allegation contained in Paragraph "16" of the complaint except admits that Grace and Pan American in 1928 agreed to establish a pioneer United States flag carrier which was to be owned in equal shares by Grace and Pan American.

17. Avers that Panagra was duly organized under the laws of the State of Delaware in January, 1929 by Grace [fol. 20] and Pan American each of which purchased and has at all times since then owned 50% of Panagra's outstanding capital stock; that Panagra acquired all the rights assigned to Peruvian Airways Corporation by Huffaland Dusters, Inc. as alleged in Paragraph "9" of this answer; that Panagra was awarded a mail contract by the Postmaster General of the United States, with the approval of the Attorney General, for the transportation of mail between the Canal Zone and Santiago, Chile with the option in the Postmaster General to require extension of the service to Buenos Aires, Argentina and Montevideo, Uruguay; that in May, 1929 Panagra commenced operations under the said contract between the Canal Zone and Mollendo, Peru; that in October, 1929, its operations were extended to Buenos Aires, Argentina and since that time Panagra has transported persons, property and mail over its entire route between the Canal Zone and Buenos Aires, Argentina; except as hereinabove admitted, denies each and every allegation contained in Paragraph "17" of the complaint.

18. Denies each and every allegation contained in Paragraph "18" of the complaint.

19. Admits that Grace and Pan American at all times since the incorporation of Panagra have each owned 50% of its stock and elected an equal number of its directors; that Grace and Pan American and Panagra have entered into agreements with respect to the management and operation of Panagra; except as hereinabove admitted, denies each and every allegation contained in Paragraph "19" of the complaint.

20. Avers that certain of the advertising, sales and commercial services of Panagra are handled by Grace and Pan American; except as hereinabove admitted, denies each and every allegation contained in Paragraph "20" of the complaint.

[fol. 21]. 21. Denies each and every allegation contained in Paragraph "21" of the complaint.

22. Denies each and every allegation contained in Paragraph "22" of the complaint.

23. Denies each and every allegation contained in Paragraph "23" of the complaint except admits that Pan American has opposed the extension of Panagra's route to the United States; that in 1951 Pan American opposed approval by the Civil Aeronautics Board of an interchange of equipment agreement between Panagra and National Airlines, Inc.; that the Civil Aeronautics Board has determined that it would be in the public interest for Panagra to provide one-plane through service between its terminal in Buenos Aires and the northeastern sector of the United States.

24. Denies each and every allegation contained in Paragraph "24" of the complaint except admits upon information and belief that Pan American has acquired the stock or assets of, or other interests in, air carriers operating in Latin American countries and that Panagra has acquired minority stock interests in two local air carriers operating within Bolivia and Peru.

25. Denies each and every allegation contained in Paragraph "25" of the complaint.

Second Defense

26. A decree of divestiture against Grace should not be granted because

(1) It is unnecessary, unreasonably punitive and contrary to the public interest.

(2) Grace in itself or in its capacity as a 50% stockholder of Panagra, not a monopoly in air transportation nor has it acquired the power to monopolize and restrain air transportation.

[fol. 22] (3) There is no clear, wilful, serious and continuing violation of the antitrust laws.

(4) Any agreement, understanding or transaction alleged in the complaint in which Grace has participated or to which it has been a party was disclosed to, acquiesced in or approved by the Civil Aeronautics Board over a period of many years.

27. Grace's interest in air transportation and its investigation into the possibility and desirability of establishing the same in South America dates back to Lindbergh's transatlantic flight in 1927 demonstrating the feasibility of air transportation. In 1928 Grace agreed with Pan American to organize a company to engage in transportation by air of persons, property and mail along the west coast of South America. Prior to the organization of that company, Grace had no interest in any phase of aeronautics and was not in any respect competitive with Pan American. Panagra was organized in January, 1929 and its charter authorized it to engage in air transportation "when and where lawful". Grace by agreement or otherwise has never limited or attempted to limit the areas of Panagra's operations.

28. Panagra commenced operations in May, 1929 under an airmail contract with the Postmaster General of the United States. In October, 1929 it became the first United States flag carrier to establish scheduled air service with through connections to Buenos Aires. Its record since that time has been one of continuous growth—by extensions of its route, improvement of its flight equipment, additions to its schedules and expansion of services.

29. The Civil Aeronautics Board on July 22, 1940 recognized Grace's right to hold its stock interest in Panagra when it issued a certificate of public convenience and necessity to Panagra under the "grandfather" clause of the Civil Aeronautics Act (49 U. S. C. Sec. 401(e)) covering its operations at that time. The extensions of its route since [fol. 23] then have been authorized by amendments of its certificate.

30. Panagra as a certificated air carrier regulated under the Civil Aeronautics Act has promptly and regularly notified the Civil Aeronautics Board of its operations and its relations with its stockholders through the filing of periodic reports, agreements and understandings.

31. The Civil Aeronautics Board by order dated May 5, 1947 (Serial No. E-570) approved the Through Flight Agreement between Panagra and Pan American dated July 31, 1946 providing for direct one-plane service by Panagra's aircraft between Buenos Aires and Miami and approved the Parent Company Agreement of the same date between Grace and Pan American. The Civil Aeronautics Board found that the arrangement under these agreements was "beneficial to the public," and that "such transaction does not result in creating a monopoly." The Civil Aeronautics Board by order dated May 4, 1950 (Serial No. E-4130) has continued its approval of these agreements to date.

32. Grace in continuing its efforts to extend Panagra's service as required in the public interest and in the interest of Panagra negotiated with National Airlines, Inc. and Pan American to the end of working out an interchange of equipment which would permit Panagra to extend to the public through one-plane service between Buenos Aires and Washington and New York. An agreement was finally entered into by Panagra and National Airlines, Inc. and was filed with the Civil Aeronautics Board for approval (The New York-Balboa Through Service Proceeding, Docket No. 4882).

33. The Civil Aeronautics Board on April 12, 1951 (Order Serial No. E-5282) in the light of the strong public desire for this through service tentatively approved of the interchange of equipment agreement. In approving the [fol. 24] agreement the Civil Aeronautics Board determined that such agreement "is in the public interest, is not in violation of the Civil Aeronautics Act and will not create a monopoly or monopolies and thereby jeopardize any other carrier not a party thereto."

5

34. By Order dated July 13, 1951 (Order Serial No. E-5541) the Civil Aeronautics Board rescinded the aforesaid order of tentative approval in view of various objections raised by certain parties to the proceeding and postponed further consideration of the agreement.

35. Subsequently Pan American and Eastern Airlines, Inc. filed an agreement with the Civil Aeronautics Board providing for an interchange of equipment between Pan American and Eastern Airlines, Inc. with provisions for participation by Panagra. Grace and Panagra have endorsed this agreement which is presently pending approval by the Civil Aeronautics Board.

36. Grace in its relations with Panagra has at all times cooperated, and is continuing to cooperate, to the end of developing and expanding Panagra in conformity with the public convenience and necessity standard of the Civil Aeronautics Act.

Third Defense

37. Repeats and realleges each and every allegation contained in Paragraphs "27" through "36" of this answer with the same force and effect as if herein fully set forth.

38. Any agreement, understanding or transaction alleged in the complaint in which Grace has participated or to which it has been a party has been in conformity with and within the rulings, decisions and orders issued by the Civil Aeronautics Board under the Civil Aeronautics Act of 1938 and the exemptions, privileges and immunities provided thereby.

[fol. 25]

Fourth Defense

39. Repeats and realleges each and every allegation contained in Paragraphs "27" through "36" of this answer with the same force and effect as if herein fully set forth.

40. The relief sought against Grace herein—with respect to transactions disclosed to, acquiesced in or approved by plaintiff over a period of many years—should under principles of equitable estoppel and laches be denied.

Wherefore; the defendant, W. R. Grace & Co. prays that the complaint herein be dismissed as to it, with costs.

Dated: New York, N. Y., April 27, 1954.

Cahill, Gordon, Reindel & Ohl, By John T. Cahill,
Attorneys for Defendant, W. R. Grace & Co., 63
Wall Street, New York 5, N. Y.

[fol. 26] Proof of Service (omitted in printing).

[fol. 27] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

[Title omitted]

ANSWER OF DEFENDANT PAN AMERICAN-GRACE AIRWAYS, INC.
—Filed April 27, 1954

Defendant, Pan American-Grace Airways, Inc. (hereinafter referred to as "Panagra"), by its attorneys, answers the complaint herein as follows:

1. Admits so much of paragraph 1 of the complaint as alleges that the complaint is filed and that jurisdiction of this Court is invoked under the provision of the statute therein referred to. Except as so admitted, denies each allegation of paragraph 1 of the complaint.

2. Admits the allegations of paragraphs 2 and 5 of the complaint.

3. Denies upon information and belief so much of paragraph 3 of the complaint as alleges that subsidiaries of Pan American Airways Corporation were engaged in the transportation by air of persons, property and mail throughout the world. Except as so denied, admits each allegation of paragraph 3 of the complaint.

4. Admits so much of paragraph 4 of the complaint as alleges that defendant W. R. Grace & Company is a cor-

poration organized in 1899 under the laws of the State of Connecticut; that it has subsidiaries which engage in various aspects of industry, trade and commerce, including steamship transportation between the United States and Latin America; that it owns all of the capital stock of Grace Line, Inc., which operates steamship lines for the transportation of persons, property and mail between ports of the United States and the west coast of South America; and that it has its principal office at 7 Hanover Square, New York, New York. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation of paragraph 4 of the complaint.

5. Admits each allegation contained in paragraph 6 of the complaint except denies knowledge or information sufficient to form a belief that Grace Line, Inc., was and is the [fol: 28] largest company engaged in steamship transportation between the United States and countries located on the west coast of South America; that in 1950 Grace Line, Inc. transported about 90% of the passengers traveling by liner service over the steamship trade route between United States Atlantic ports and the west coast of South America and about 60% of the total commercial cargo carried on all liner service over said route; that Grace Line, Inc. transports virtually all of the passengers and commercial cargo carried in United States flag ships over this trade route and that in addition to its dominant position through Grace Line, Inc. in transportation between the countries on the west coast of South America and between those countries and the United States, defendant Grace occupies an important position in Latin American trade through a banking subsidiary and numerous other subsidiaries located principally in South America.

6. Admits so much of paragraph 7 of the complaint as alleges that in 1928 air transportation service was being furnished in a number of South American countries by carriers other than United States flag air carriers. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation of paragraph 7 of the complaint.

7. Admits so much of paragraph 8 of the complaint as alleges that the unduplicated weighted average route mileage of the Latin American air transportation system operated by Pan American is approximately 15,000 route miles certificated by the Civil Aeronautics Board and extends from points in the United States to Latin America, including the Caribbean Sea, Mexico and Central America to the Canal Zone, and by way of the north and east coasts of South America to Rio de Janeiro and Buenos Aires, linking the United States with the principal traffic centers in Latin America served by Pan American and that aside from its 50% ownership in Panagra and its ownership of stock in Aerovias Nacionales de Colombia, Pan American does not engage in air transportation between countries located on the west coast of South America unless this phrase could be construed to cover Uraba, Medellin & Central Airways, Inc., all of the capital stock of which is owned by Pan American, which operates between Panama and Medellin, Colombia, pursuant to a certificate issued under the Civil Aeronautics Act. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation contained in paragraph 8 of the complaint.

8. Admits so much of paragraph 9 of the complaint as alleges that in 1929 Pan American and Grace caused Panagra to be formed and have since its formation each owned 50% of its authorized issued and outstanding stock; that Panagra's unduplicated weighted average route mileage, certificated by the Civil Aeronautics Board is approximately 6,000 miles which extend from its terminal at the Canal Zone southward, through principal traffic centers of [fol. 29] countries located on the west coast of South America and across the Andes to Buenos Aires, Argentina. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation contained in paragraph 9 of the complaint.

9. Admits so much of paragraph 10 of the complaint as alleges that from 1930 until 1946, Pan American was the only United States flag air carrier operating scheduled service between the United States and the countries on the

north and east coasts of South America and admits that about nine-tenths of all passengers traveling by United States flag air carriers between points in the Eastern coastal states of the United States and countries on the north and east coasts of South America are carried by Pan American and that Pan American and Panagra carry about four-fifths of the passengers traveling by United States flag air carriers between points in the Eastern coastal states of the United States and countries on the west coast of South America, including passengers traveling over the west coast route to Buenos Aires and admits that during the twelve month period ending June, 1951, foreign flag carriers transported less than one-fourth of the air passenger traffic between the United States and the Canal Zone and between the United States and South America. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation of paragraph 10 of the complaint.

10. Admits so much of paragraph 11 of the complaint as alleges that Panagra does not serve any points served by Pan American on its east coast route except that Pan American and Panagra have common terminals at the Canal Zone and at Buenos Aires; that a part of the traffic of both Pan American and Panagra handled at Buenos Aires is through traffic to or from the United States; that the distance from United States terminals to Buenos Aires is less by Panagra west coast route than by way of Pan American's east coast route as presently operated; that prior to the passage of the Civil Aeronautics Act in 1938, Panagra never operated its own transportation service north of the Canal Zone and since that time Panagra has not filed an application with the Civil Aeronautics Board for authority to operate such air transportation; that most of the traffic which Panagra handles at the Canal Zone originates in or is destined to the United States and is dependent for through United States service upon operations furnished by Pan American between the United States and the Canal Zone. Except as so admitted, denies each allegation contained in paragraph 11 of the complaint.

11. Admits so much of paragraph 12 of the complaint as alleges that Panagra's route along the west coast of

South America serves some of the ports and the principal cities in the countries served by the steamship routes of Grace Line, Inc., which link the Atlantic coast of the United States to ports on the west coast of South America; that both Panagra and Grace Line, Inc. carry a number of inter-[fol. 30] mediate passengers traveling within or between the countries served by Panagra; and avers that Grace Line, Inc. carries passengers, freight and mail between New York and points on the west coast of South America; that Panagra carries passengers, freight and mail between the Canal Zone and points on the west coast of South America and Buenos Aires, Argentina; that there are various differences in circumstances, terms and conditions under which passengers, freight and mail are carried by Grace Line, Inc. and Panagra including the flying time between New York and Valparaiso, Chile which is approximately 22 hours by air and approximately 18 days by steamship; freight by water transportation primarily consists of bulk cargo such as heavy machinery, automobiles, etc., while that carried by air consists chiefly of medicines, perishables, etc.; the highest freight rate charged by Grace Line, Inc. is less than 2¢ per ton mile compared with Panagra's average charge per revenue ton mile of approximately 41¢. Except as so admitted, denies each allegation contained in paragraph 12 of the complaint.

12. Admits each allegation contained in the second and third sentences of paragraph 13 of the complaint and denies each allegation contained in the first and last sentence of said paragraph 13 of the complaint.

13. Admits so much of paragraph 14 of the complaint as alleges that during the year 1949 Pan American carried approximately 700,000 air passengers over its Latin American routes and its total operating revenue for that year from its Latin American airline operations amounted to \$65,500,000, of which about \$40,500,000 was revenue from passengers; about \$15,800,000 revenue from United States and foreign air mail and about \$9,200,000 from cargo and other sources, and during the same period Panagra carried about 90,000 passengers, including intermediate traffic between and within countries in South America, as well as

passengers traveling to and from the United States; and its total operating revenue amounted to about \$15,035,000 of which about \$10,800,000 was revenue from passengers, and about \$2,645,000 was revenue from foreign and United States air mail, and about \$1,600,000 from cargo and other sources. Except as so admitted, denies knowledge or information sufficient to form a belief as to each allegation of paragraph 14 of the complaint.

14. Denies each allegation contained in paragraphs 15, 20, 23 and 25 of the complaint and in the last two sentences of paragraph 18 of the complaint; and with respect to the allegations in the first sentence of said paragraph 18 denies that it has knowledge or information sufficient to form a belief.

15. Admits so much of paragraph 16 as alleges that Pan American and Grace entered into an agreement for the establishment of Panagra, and that Panagra was to establish and operate an air line on the west coast of South America and was to be owned in equal shares by Pan [fol. 31] American and Grace. Except as so admitted, denies each allegation of paragraph 16 of the complaint.

16. Denies, upon information and belief, so much of paragraph 17 of the complaint as alleges that Panagra acquired the Peruvian rights and concessions described in paragraph 9 of the complaint from Pan American pursuant to the agreement referred to in paragraph 16 of the complaint. Except as so denied, admits each allegation contained in paragraph 17 of the complaint.

17. Admits so much of paragraph 19 of the complaint as alleges that Pan American and Grace have entered into agreement and understandings for the management and conduct of certain of the affairs of Panagra. Except as so admitted, denies each allegation contained in paragraph 19 of the complaint.

18. Admits that defendant Pan American and Grace each has retained ownership of 50% of the voting stock of Panagra and each has retained an equal number of representatives on the Board of Directors of Panagra. Except

as so admitted, denies each allegation of paragraph 21 of the complaint.

19. Admits that Pan American and Grace have the powers incident to their stock ownership in Panagra. Except as so admitted, denies each allegation contained in paragraph 22 of the complaint.

20. Admits that Panagra has acquired a minority stock interest in two air lines which operate local services in Latin American countries not substantially competitive with those of Pan American or of Panagra and admits that Pan American has acquired the stock or assets of, or other interests in, air lines which operate in Latin American countries. Except as so admitted, denies each allegation contained in paragraph 24 of the complaint.

Wherefore, defendant Pan American-Grace Airways, Inc., demands judgment dismissing the complaint, with costs.

Dated April 27, 1954.

White & Case, Attorneys for defendant, Pan American-Grace Airways, Inc., By Thomas Kieruder,
A Member of the Firm, 14 Wall Street, New York
5, N. Y.

[fol. 32] Proof of Service (omitted in printing).

[fol. 33] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

[Title omitted]

ANSWER OF DEFENDANT PAN AMERICAN WORLD AIRWAYS,
INC.—Filed April 27, 1954

Defendant Pan American World Airways, Inc. (hereinafter called "Pan American"), by its attorneys, answers the complaint herein as follows:

I.

1. Denies paragraph 1 except that it admits that plaintiff seeks to invoke jurisdiction on the basis of the provisions of the statutes referred to therein.

2. Admits paragraph 2.

II.

3. Admits paragraph 3 except the fourth sentence of said paragraph, as to which it denies that subsidiaries of Pan American Airways Corporation were engaged in the transportation by air of persons, property and mail throughout the world.

4. Admits that W. R. Grace and Company (hereinafter called "Grace") is a corporation organized under the laws of the State of Connecticut, that Grace has subsidiaries which engage in numerous aspects of industry, trade and commerce, including steamship transportation between the United States and Latin America, that Grace owns all of [fol. 34] the capital stock of Grace Line, Inc., which operates steamship lines for the transportation of persons, property and mail between ports of the United States and ports in South America, including the west coast, and that Grace has its principal office at 7 Hanover Square, New York, New York, and alleges that it is without knowledge or information sufficient to form a belief as to the other allegations of paragraph 4.

5. Admits paragraph 5.

III.

6. Admits paragraph 6 except that it alleges that it is without knowledge or information sufficient to form a belief as to the percentage of passengers and cargo carried by Grace Line, Inc. and as to whether Grace Line, Inc. transports virtually all of the passengers and commercial cargo carried in United States-flag ships between the United States and the west coast of South America.

7, 8, 9, 10, and 11. Denies paragraphs 7, 8, 9, 10 and 11, except that it admits and avers as follows:

A. In the years immediately after the conclusion of World War I air transportation developed much more intensively in Europe than in the United States. European-owned airlines established themselves in Latin America at a relatively early date. German air services had commenced operations in Latin America as early as 1921, and the French had followed shortly thereafter. By 1928 both the Germans and the French had built up substantial systems in South America. The German-controlled Scadta was operating in interior Colombia and between Colombia and Ecuador and was seeking to cross the Panama Canal and extend its operation up through Central America to Cuba and the United States. Another German company, Lloyd Aero Boliviano, was operating in Bolivia and had projected services reaching through Brazil to the Atlantic seaboard [fol. 35] at Rio de Janeiro. Sindicato Condor, an affiliate of the German Lufthansa, was operating on a 900-mile route on the Brazilian coast south of Rio and had projected a line across the South Atlantic to Europe. The French international airline, Aeropostale, had initiated service between Natal, Brazil, and Buenos Aires, Argentina, in November, 1927. Early in 1928 it established service between France and Buenos Aires, utilizing fast destroyers, made available by the French Government, as a link for transporting mails between Dakar, Africa, and Natal. The destroyers were later superseded by mail planes. Aeropostale and its subsidiaries supplemented these services by routes in Argentina and Chile. Aeropostale also held concessions to extend its service from Natal to Trinidad and the French West Indies and between Trinidad and Venezuela and was actively negotiating for an exclusive international mail contract in Peru. Both the French and the Germans had projected air routes across and around the South American continent and even to the United States.

B. Until late in the 1920s it was exceedingly difficult to obtain the capital needed to develop air transportation within the United States. It was even more difficult to obtain the capital required to develop air transportation under the American flag between the United States and Latin America, where the operator was obliged to provide not only flight equipment, maintenance facilities and working

capital, but also airports and meteorological and communication services which within the United States were normally provided by governmental entities. Until 1928 there was no legislation under which the Federal Government could grant the financial assistance that was essential if air transportation to Latin America under the American flag was to be established.

[fol. 36] C. United States interest in international air transportation was stimulated by the Lindbergh flight across the Atlantic in the early summer of 1927. Pan American was formed in that year and made its first flight from Key West to Havana in October, 1927. At the end of 1927 Pan American's entire fleet consisted of two Fokker F-7s and one Fairchild C-2.

D. On March 8, 1928, there was enacted the Foreign Air Mail Act, 45 Stat. 248. This authorized the Postmaster General to enter into contracts for not more than ten years for the air transportation of United States mail to foreign countries or insular possessions of the United States at rates not exceeding \$2.00 per mile. The Postmaster General was to award each contract to the lowest responsible bidder who he should find "can satisfactorily perform the service required to the best advantage of the Government."

E. Pan American Airways Corporation (originally known as "Aviation Corporation of the Americas") was formed in June, 1928, as a means for obtaining the capital required to enable Pan American, its operating subsidiary, to enter bids for foreign airmail contracts to Latin America which were being or were about to be advertised by the Postmaster General pursuant to the Foreign Air Mail Act of 1928 and to conduct operations under such contracts as might be awarded to Pan American.

F. During May and July, 1928, the Postmaster General awarded to Pan American three ten year contracts for air service to Latin America under the Foreign Air Mail Act of 1928. Among these was a contract, awarded to Pan American on July 13, 1928, for Foreign Air Mail Route No. 5 from Miami, Florida, to the Canal Zone, with an option in the Postmaster General to extend the contract

along the North Coast of South America via Trinidad as far as Paramaribo, Dutch Guiana. Another contract, also [fol. 37] awarded to Pan American on July 13, 1928, was for Foreign Air Mail Route No. 6 from Miami to Puerto Rico, with an option in the Postmaster General to extend the contract to Trinidad.

G. Prior to the award of these contracts, Pan American had formulated plans for the extension of its projected Miami-Canal Zone operation down the West Coast of South America. By the end of July, 1928, Pan American had instituted negotiations for operating rights in Panama, Colombia and Ecuador, held an option on an operating concession in Peru which another company had obtained for Pan American's account, and had ordered sufficient aircraft to operate the northern portion of the route from the Canal down the West Coast in addition to its other routes.

H. At the end of 1928 the capital of Aviation Corporation of the Americas amounted to only \$3,379,000, Pan American, its operating subsidiary had little more than 100 employees, and the total horsepower and passenger capacity of Pan American's 12 aircraft were roughly equivalent to those of one modern airplane.

I. In the fall of 1928, Aviation Corporation of the Americas entered into an agreement with Grace, evidenced by two letters dated respectively August 31 and September 7, 1928, copies of which are annexed hereto as Annex A and made a part hereof. By this agreement each of the two companies agreed to subscribe \$25,000 to the capital stock of a corporation to be formed under the laws of Delaware to operate an airplane service in Peru. The agreement provided that the two companies would cooperate in studying the costs of operation "on a route from the Panama Canal to Valparaiso" and that if Aviation Corporation of the Americas determined "that it is advisable to bid on a contract for carrying the mails between the Panama Canal and Valparaiso", the amount contributed by Grace to the [fol. 38] stock of the company which was to operate in Peru should be treated as a contribution to the stock of the company making the bid and Grace was to have an

option to take an additional interest in such a company not to exceed 50% of the total capitalization. Pan American was to "have charge of the operation of the service from the Canal to Valparaiso" and the Grace houses on the West Coast of South America were to act as agents for the company. The Delaware corporation referred to in the letters was formed under the name "Peruvian Airways Corporation", Grace and Aviation Corporation of the Americas subscribed \$25,000 each to its capital, and it began operations in Peru in September, 1928.

J. On January 31, 1929, the Post Office Department issued an advertisement for a contract for Foreign Air Mail Route No. 9, from the Canal Zone down the West Coast of South America to Santiago, Chile, with an option in the Postmaster General to extend the service from Santiago across the Andes to Buenos Aires and Montevideo. Pan American-Grace Airways, Inc. (hereinafter referred to as "Pan American-Grace") was incorporated to bid for this contract, Grace availed itself of the option which Aviation Corporation of the Americas had granted to it in the fall of 1928 to acquire a 50% interest in the company, and, with the assent of its two owners, Pan American-Grace submitted a bid for the mail contract. Accordingly, Aviation Corporation of the Americas and Grace each subscribed to the capital stock of Pan American-Grace \$500,000, including the amounts previously subscribed by them to the stock of Peruvian Airways Corporation.

K. On March 2, 1929, there was enacted the Foreign Air Mail Act of 1929, 45 Stat. 1449. This differed from the Foreign Air Mail Act of 1928 primarily in that it authorized the Postmaster General to pay for transportation from foreign countries to the United States, as well as in the [fol. 39] outbound direction and provided for the amendment to this end of contracts which had been entered into under the 1928 Act. On March 2, 1929, the Postmaster General, pursuant to the Foreign Air Mail Act of 1929, awarded to Pan American-Grace the contract for Foreign Air Mail Route No. 9. A number of other companies also submitted bids for this contract. The Postmaster General found that although Pan American-Grace was not the low

bidder, it was the lowest responsible bidder that could satisfactorily perform the service to the best advantage of the Government. Among the principal grounds for such finding were the two years of negotiation and preparation for the service down the West Coast in which Pan American had engaged, Pan American's record of successful operations in the Caribbean, and the facilities of Grace along the line of the proposed route. It was not the policy of the Postmaster General at this or any other date to have more than one company operate under the Foreign Air Mail Act over the same route. The financial assistance from the plaintiff provided by a contract under the Foreign Air Mail Act was essential to the institution of air service from the Canal down the West Coast and remained essential to the maintenance of such service until it was replaced by financial assistance from the plaintiff under the Civil Aeronautics Act of 1938, 52 Stat. 980, and such assistance under that Act has since been so essential.

L. The award of Foreign Air Mail Contract No. 9 to Pan American-Grace was protested by the low bidder. The Postmaster General under the Hoover Administration, which had come into office shortly after the award of the contract, requested the opinion of the Department of Justice as to the legality of the award. Attorney General Mitchell, in an opinion dated May 6, 1929, which is reported in 36 Opinions of Attorney General 33, sustained the action of the Postmaster General under the previous Coolidge Administration in making the award. The papers before the Attorney General fully disclosed the identity of the two owners of Pan American-Grace and the circumstances of its formation.

[fol. 40] M. Pan American-Grace commenced operations under Foreign Air Mail Contract No. 9 on July 12, 1929. Until the end of 1929 operations as far south as Guayaquil, Ecuador, were conducted by aircraft and personnel of Pan American. The Postmaster General having extended the contract from Santiago to Buenos Aires, Pan American-Grace operated its first flight across the Andes to Buenos Aires on October 12, 1929.

N. During 1928 and 1929 Pan American expanded and extended its operations in the Caribbean area and on the North and East Coasts of South America. By the end of 1929 Pan American was operating regular service down the East Coast to Paramaribo, Dutch Guiana. In September, 1930 Pan American acquired the assets of New York, Rio and Buenos Aires Line, Inc., a company which had been formed by persons independent of Pan American and Grace with the purpose of operating an airline through Puerto Rico and Trinidad down the East Coast of South America to Buenos Aires. Pan American was urged by the Postmaster General to make this purchase. It declined to do this unless it received assurance that the Department of Justice would not regard the purchase as violating the anti-trust laws. Such assurance was obtained by letter from the Department of Justice dated August 1, 1930. The papers before the Department again disclosed the facts as to the formation of and stock ownership in Pan American-Grace. On September 24, 1930, the Postmaster General awarded to Pan American a contract for Foreign Air Mail Route No. 10 from Paramaribo, Dutch Guiana, to which Pan American was already operating under its contracts for Foreign Air Mail Routes 6 and 5, to Santos, Brazil, with an option in the Postmaster General to extend the contract to Buenos Aires. Pan American commenced service to Buenos Aires down the east coast pursuant to this contract in 1931. This [fol. 41] completed a circle of Pan American routes around South America from Miami to Buenos Aires—the entire eastern half, from Miami through Puerto Rico, Trinidad and Rio, and the northern portion of the western half, from Miami to the Canal, being operated by Pan American itself, and the southern portion of the western half from the Canal down the West Coast and over the Andes being operated by Pan American-Grace as an extension of Pan American's service in line with the agreement pursuant to which Pan American-Grace had been formed. All these operations were conducted under contracts awarded by the plaintiff with full knowledge of the facts as to the formation of Pan American-Grace and could not have been initiated or thereafter conducted but for the financial assistance given by plaintiff under such contracts.

O. The Civil Aeronautics Act of 1938, 52 Stat. 980, 49 U.S.C. §401 ff., directed in Section 401(e), 49 U.S.C. §481(e), that certificates of convenience and necessity should be issued to Pan American and Pan American-Grace for the operations which had been conducted by them under the various foreign airmail contracts and such certificates were issued by the Civil Aeronautics Board in the name and on behalf of the plaintiff.

P. The services of Pan American and Pan American-Grace are not competitive but complementary and have always been so intended. Pan American-Grace was formed and has existed as an extension of Pan American's service to the Canal to give Pan American access to the West Coast of South America. The bulk of Pan American-Grace's traffic on the segment immediately south of the Canal moves north of the Canal on Pan American's routes to various gateways in the United States—Miami, New Orleans, Houston and Los Angeles. Similarly, a very large percentage of the traffic carried by Pan American on its routes between the Canal and these United States gateways moves [fol. 42] south of the Canal over Pan American-Grace. Of all the points which Pan American-Grace serves, Pan American competes only at Buenos Aires, (where Pan American had not operated prior to its purchase of New York, Rio and Buenos Aires Line, Inc. with the approval of the Department of Justice) and there the passenger's origin or destination in the United States and his desires as to stop-overs enroute generally determine his selection of route, so that in fact the competition is negligible.

Q. By reason of the facts set forth above, Pan American has every interest in the provision of the best possible service for traffic between the United States and points on the Pan American-Grace sector of its System. In pursuance of proposals made by Pan American many years before, an arrangement was made in 1946 and approved by the Civil Aeronautics Board in 1947 whereby certain aircraft of Pan American-Grace, operated by that Company on its route south of the Canal, are chartered to Pan American for through operation by Pan American, along with other Pan American equipment, on one of the Pan

American routes connecting the Canal with the United States, namely, that between the Canal and Miami. This agreement, known as the Through Flight Agreement, provided that the charter of the aircraft of Pan American-Grace to Pan American should be extended from Miami on to New York in the event that, pursuant to a then pending application to the Civil Aeronautics Board, Pan American should be certificated for this route. In 1949 Pan American and Pan American-Grace entered into an arrangement with National Airlines, Inc. whereby the aircraft of Pan American-Grace which were chartered to Pan American for operation between the Canal and Miami should be further chartered to National for operation over that Company's route between Miami and New York. National repudiated this arrangement at the end of 1950, and Pan American immediately instituted negotiations with Eastern [fol. 43] Air Lines, Inc. for an arrangement which included, subject to agreement by Pan American-Grace, the chartering to Eastern, for operation over its Miami-New York route, of the aircraft of Pan American-Grace which were chartered to Pan American for operation by Pan American between the Canal and Miami. This proposal, to which Pan American-Grace has agreed, has been pending before the Civil Aeronautics Board since January, 1951.

R. With respect to certain allegations of paragraphs 7, 8, 9, 10 and 11 not specifically heretofore answered, Pan American:

(1) Admits that it operates routes in Latin America under certificates issued by the Civil Aeronautics Board as set forth in the second sentence of paragraph 8, and avers that the unduplicated weighted average mileage of the routes so operated is approximately 15,000 route miles rather than the 60,000 route miles alleged by plaintiff.

(2) Admits that aside from Pan American-Grace and Aerovías Nacionales de Colombia, Pan American has no financial interest in any company engaged in air transportation between countries located on the west coast of South America unless this phrase⁴ be construed to cover Uraba, Medellín & Central Airways, Inc., all of the capital stock of which is owned by Pan American, which operates be-

tween Panama and Medellin, Colombia, pursuant to a certificate issued under the Civil Aeronautics Act.

(3) Admits that Pan American-Grace's line is as described in the last sentence of paragraph 9 and avers that the unduplicated weighted average route mileage of Pan American-Grace is approximately 6,000 miles rather than the 10,000 alleged by the plaintiff.

(4) Admits that from 1930, when it acquired the assets of New York, Rio and Buenos Aires Line, Inc. at the in-[fol. 44] stance and with the approval of the plaintiff as set forth above, until 1946, Pan American was the only United States-flag air carrier operating scheduled service between the United States and the countries on the North and East Coasts of South America, and avers that this resulted from policies adopted by the plaintiff, both before and after enactment of the Civil Aeronautics Act of 1938.

(5) Admits the allegations of paragraph 10 with respect to the proportion of passengers carried by United States-flag air carriers carried by Pan American and Pan American-Grace, but avers that in computing these proportions plaintiff has included points in South America to which, as a result of actions and policies of plaintiff, no other United States-flag air carrier has been authorized to operate.

(6) Admits the allegations of paragraph 10 with respect to the proportion of air passenger traffic carried by foreign-flag lines between the United States and the Canal Zone and between the United States and South America during the twelve months period ending June 30, 1951, but avers that foreign-flag carriers cannot lawfully carry traffic between the United States and the Canal Zone and that the proportion of traffic carried by foreign-flag carriers between the United States and South America has increased since 1951 and, on the basis of developments in other parts of the world, can be expected to increase further.

(7) Admits that neither prior to nor since passage of the Civil Aeronautics Act of 1938 has Pan American-Grace ever operated its own transportation service north of the Canal or sought authority for the operation of such trans-

portation service, and avers that Pan American-Grace was organized to operate the portion of the Latin American services of the Pan American Airways System from the Canal down the west coast of South America under the circumstances set forth above, and was not intended to operate north of the Canal.

[fol. 45] 12. Admits paragraph 12.

13. Denies the first and last sentences of paragraph 13 and admits the second and third sentences of said paragraph.

14. Admits the first, second and third sentences of paragraph 14, except that it denies upon information and belief that Panagra's total operating revenues and mail revenues in 1949 were as alleged in said paragraph 14, and alleges that it is without knowledge or information sufficient to form a belief as to the fourth and fifth sentences.

IV.

15. Denies paragraph 15.

16. Denies paragraph 16 except that it admits and avers that the circumstances under which Pan American-Grace was formed were as set forth in paragraphs 7, 8, 9, 10 and 11 above.

17. Denies paragraph 17 except that it admits and avers that Pan American-Grace was organized and has operated as set forth in paragraphs 7, 8, 9, 10 and 11 above.

18. Denies paragraph 18 except as admitted and averred in paragraphs 7, 8, 9, 10 and 11 above and that it further admits that, as a consequence of the function which Pan American-Grace was intended to serve and has served in the Pan American Airways System, Pan American has not, since the formation of Pan American-Grace, applied for or operated for its own account an airline along the west coast of South America and that, pursuant to authorizations granted by plaintiff, Pan American furnishes to Pan American-Grace at the Canal both through and connecting service to various points in the United States.

19. Denies paragraph 19 except that it admits that since the formation of Pan American-Grace, Pan American (or its predecessor company) and Grace have each owned 50% of its stock, have elected an equal number of its directors, and from time to time have entered into agreements with respect to the management and conduct of its affairs, which agreements and understandings have been fully disclosed to plaintiff.

{fol. 46} 20. Denies paragraph 20.

21. Denies paragraph 21 except that it admits that Pan American (or its predecessor company) and Grace have each retained ownership of 50% of the voting stock of Pan American-Grace and have elected an equal number of representatives on Pan American-Grace's Board of Directors.

22. Denies paragraph 22 except that it admits that Pan American and Grace have the powers incident to their stock ownership in Pan American-Grace and the agreements between them.

23. Denies paragraph 23.

24. Denies paragraph 24 except that it admits that Pan American acquired the assets of New York, Rio and Buenos Aires Line, Inc. at the instance and with the approval of the plaintiff as set forth above and that Pan American (and its predecessor company) and Pan American-Grace have from time to time acquired stock interests in certain other air lines operating services in Latin American countries not substantially competitive with those of Pan American and Pan American-Grace.

V.

25. Denies paragraph 25.

For a First Affirmative Defense Pan American Alleges:

26. The agreement whereby Pan American's predecessor company granted Grace an option to acquire up to a 50% interest in Pan American-Grace as the west coast link of the Pan American system and Grace acquired such an interest was fully disclosed to and approved by the

plaintiff in 1928. The participation of Pan American's predecessor company and Grace in Pan American-Grace was considered by the plaintiff to be a reason for the selection of Pan American-Grace for the difficult task of pioneering air service from the Canal down the west coast of South America in 1929. Pan American and its predecessor company have invested and kept invested large amounts in Pan American-Grace in reliance on the foregoing. Plaintiff is estopped from now contending that these very facts were a violation of the anti-trust laws. Alternatively, plaintiff has been guilty of unreasonable and inexcusable delay and laches in asserting any such claim.

**For a Second Affirmative Defense
Pan American Alleges:**

27. The facts as to the stock ownership of Pan American-Grace and as to the limited character of its operation were known to the Congress and the President at the time of the enactment of the Civil Aeronautics Act of 1938. By said Act plaintiff ratified and confirmed said ownership and limitation.

**For a Third Affirmative Defense
Pan American Alleges:**

28. Pan American-Grace has derived great benefits from its participation in the Pan American Airways System. All of Pan American-Grace's sales activities, apart from points on its own route, are conducted by Pan American on its behalf. As a result Pan American-Grace enjoys the advantages of Pan American's 43 sales offices in the United States, Pan American's 64 sales offices in Latin America, and Pan American's 128 sales offices in other parts of the world. Pan American's System timetables, which are published monthly with a distribution of approximately 275,000 copies, show the services of Pan American-Grace integrated with the services of Pan American. So likewise do Pan American's many insertions in aviation and other travel guides. Since 1947 Pan American-Grace's major aircraft and engine maintenance and flight training have likewise been performed by Pan Ameri-

can for its account. Pan American-Grace likewise enjoys the benefits of Pan American's technical, research, purchasing and other services at a cost far below that which Pan American-Grace would have for performing the same services. All these arrangements have been approved by [fol. 48] plaintiff, acting through its duly constituted regulatory agency, the Civil Aeronautics Board. Divorced from Pan American, Pan American-Grace could enjoy no similar advantages except at a prohibitive cost.

29. The relief sought by the plaintiff against Pan American would be contrary to the public interest. For the reasons set forth above, divorce of Pan American-Grace from Pan American would decrease its revenues and increase its costs, and would likewise increase the net costs of United States-flag air transportation generally. In view of the provisions of Section 406(b) of the Civil Aeronautics Act, 49 U.S.C. §486(b), for the subsidization of air carriers, this would require the plaintiff to pay added subsidies for the maintenance of United States-flag air carriers abroad, thereby imposing increased and unnecessary burdens upon the plaintiff and its taxpayers in direct contravention of policies which are currently being announced by responsible officers of the plaintiff.

For a Fourth Affirmative Defense Pan American Alleges:

30. Both Pan American and Pan American-Grace are air carriers subject to the regulation and control of the plaintiff. The routes which they operate, their right to operate in any area, and the amount of competition which they are to have, are determined by the plaintiff, and the plaintiff has approved the area and scope of their operations.

Wherefore, judgment is demanded dismissing the complaint herein against the defendant Pan American World Airways, Inc., with costs.

Cleary, Gottlieb, Friendly & Hamilton, Attorneys
for Defendant Pan American World Airways, Inc.,
By Fowler Hamilton, A Member of the Firm,
52 Wall Street, New York 5, N. Y.

[fol. 49]

ANNEX A TO ANSWER

August 31, 1928

Aviation Corporation of the Americas,
100 East 42nd Street,
New York City

Attention: Mr. J. T. Trippe

Dear Sirs:

This will confirm arrangement under which we will associate for the commencement of an airplane service in Peru with the view of ultimately inaugurating a through mail service from the Panama Canal to Valparaiso, Chile.

A corporation will be formed under the laws of Delaware with a capital stock of \$50,000, of which \$25,000 will be subscribed by yourselves and \$25,000 by ourselves. This corporation will pay to Huff-Daland Dusters, Inc. the sum of \$15,000 for an assignment which will convey all of the rights of that company under its present Peruvian mail contract and concession. As soon as possible after the assignment has been completed, operations will be started by this company in Peru and every effort will be made to put the business there on a paying basis.

We will in the meantime cooperate with you in studying the costs of operation on the route from the Panama Canal to Valparaiso and also the advisability of requesting the U.S. Post Office Department to advertise for a mail contract on such route and the terms of such advertisement.

If you determine that it is advisable to bid on a contract for carrying the mails between the Panama Canal and Valparaiso, the Delaware corporation above referred to will be used in such service either by an increase in its capital stock to an amount sufficient to operate on the whole route or as a subsidiary operating in Peru. In either event our subscriptions to the stock of the Delaware Com-

pany shall be credited at their full amount in the capital setup of the corporation operating the through service. We shall also have a reasonable time after a study of the estimated costs of such operation to determine what interest, if any, we will take in the company making the bid in addition to our initial investment of \$25,000, such interest not to exceed, however, more than fifty percent of the total capitalization.

You will have charge of the operation of the service from the Canal to Valparaiso and our houses on the West Coast of South America will be the agents of the company on a reasonable compensation basis, such agency to continue during the life of transportation contracts undertaken by the company.

The details of carrying out the above must, of course, be worked out as we go along. We believe, however, that we have stated broadly the basis of our understanding.

Very truly yours,

W. R. Grace & Co.

William F. Cogswell,
Assistant Secretary.

WFC:GVB

[fol. 50]

September 7, 1928

W. R. Grace & Company,
10 Hanover Square,
New York City

Attention Mr. William F. Cogswell.

Dear Sirs:

We beg to confirm the arrangement set forth in your letter of August 31st.

Supplementing paragraph four, however, we would point out the fact that in the event you decide not to take up a substantial interest in a jointly owned Company, organized or to be organized for the purpose of submitting a bid on the contract for carrying mails between Panama Canal and Valparaiso then, and in that event, we would prefer to bid on the contract through the medium of Pan American Airways, Inc., or some other wholly owned subsidiary.

If this were done, we would arrange to allow you, if you desired, to take a further stock interest in Aviation Corporation of the Americas, in addition to the \$25,000 referred to in paragraph five.

Our Directors are delighted that we are to be associated with your firm in the development of air transportation on the West Coast of South America, and we look forward to a most pleasant and profitable relationship.

We would appreciate your advising us if this letter, in connection with yours of August 31st, covers your understanding of our arrangement.

Yours very truly,

AVIATION CORPORATION OF THE AMERICAS

By J. T. Trippe,
Vice President.

JTT B

[fol. 51] Proof of Service (omitted in printing),

[fol. 1]

IN UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
Civ. No. 90-259

UNITED STATES OF AMERICA, Plaintiff,

vs.

PAN AMERICAN WORLD AIRWAYS, INC., W. R. GRACE AND
COMPANY, and PAN AMERICAN-GRACE AIRWAYS, INC.,
Defendants.

Before: Hon. Thomas F. Murphy, District Judge.

Transcript of Testimony

New York, May 4, 1959,
10:30 A.M.

APPEARANCES:

Edward R. Kenney, Esq., E. Riggs McConnell, Esq.,
Herbert F. Peters, Esq., Joseph H. Shortell, Esq., Trial
Attorneys, Department of Justice, For the Plaintiff.

[fol. 2] Cahill, Gordon, Reidel & Ohl, Esqs., Attorneys
for Defendant W. R. Grace and Co., Laurence McKay, Esq.,
William E. Hegarty, Esq., Raymond L. Falls, Jr., Esq.,
of Counsel.

Cleary, Gottlieb, Friendly & Hamilton, Esqs., Attorneys
for Defendant Pan American World Airways, Inc., James
W. Lamberton, Esq., John K. Mallory, Esq., David W. Peck,
Esq., Edward A. Woolley, Esq., of Counsel.

White & Case, Esqs., Attorneys for Defendant Pan Amer-
ican Grace Airways, Inc., Thomas Kiernan, Esq., Thomas

Leary, Esq., Lowell Wadmond, Esq., of Counsel.

[fol. 16] S. ROBERT MITCHELL, called as a witness on behalf of the Government, being first duly sworn, testified as follows:

Direct examination.

By Mr. Kenney:

[fol. 20] Q. Mr. Mitchell, how does Pan American World Airways compare in size with other international airlines of the world?

A. According to the statistics that I have been able to observe, Pan American is by far the largest international air carrier in the world, whether you measure that in terms of passenger miles flown or number of passengers carried, or ton miles flown, or various other measures.

Q. Do you have some basis for your statistics?

A. That information can be observed from a study published by the International Civil Aviation Organization, which is an organization of governments of the world with respect to aviation matters, of which the United States [fol. 21] and over 70 other nations are members, and which publishes a number of studies on transportation trends and traffic information.

Q. Have you seen the digest of the ICAO for the 1947-1957 period?

A. Yes, sir. It is called a Digest of Statistics on Traffic for the period 1947-1957, and from that study you can observe the number of passengers carried or ton miles flown, or passenger miles flown by the various airlines of the world, and from that information I observed that Pan American flew approximately three and one-half billion passenger miles in the year 1957.

Q. Who was the second largest international carrier?

A. The British Overseas Airways Corporation was the second largest. The Pan American was over two and one-half times the size of BOAC, as it is referred to. It had approximately one and a third billion passenger miles of traffic in that same year.

Q. Could you tell us what share of Pan American's business is in its Latin American division?

A. Approximately one-third.

Q. Could you tell us how that compares with other international operators?

[fol. 22] A. That is almost as large as the second largest international air carrier in the world, the BOAC, which I just referred to.

Q. That is, Pan American Latin American division?

A. They carried about one and a quarter billion passenger miles in 1957, according to the ICAO, which was that organization I referred to, reports.

Q. Mr. Mitchell, can you tell us about the growth of Panagra as compared with the growth of Pan American during the period since the formation of the two companies?

A. Yes. We requested information from Pan American and from Panagra on the growth of the two companies, and I have a chart here which was developed from that information, which, I think, clearly illustrates how the two companies have grown during that period of time.

Along the bottom are the years from 1929, which was the first date that Panagra could give us information for, through 1957, at the end, and on the side here are the passenger miles scale flown by these two airlines.

The red line shows the passenger miles flown by the entire Pan American system on all of its routes and the [fol. 23] dashed red line is the Latin American division of Pan American. The Latin American division was the entire system in the early years, of course.

Panagra is indicated by these green lines.

You will see, in the early days the companies had very modest operations. Since the late 1930s, however, and particularly in the last ten years, the Pan American system has grown tremendously, as you can see there to its world-wide operations. The Latin American division of Pan American has also grown quite rapidly.

You will notice, on the other hand, that Panagra has not grown substantially despite the fact that they started operations about the same time in the same general area.

OFFER IN EVIDENCE

Mr. Kenney: May I have this chart, please?

I intend to offer this in evidence.

(A pause)

Mr. Kenney: May it please the Court, I offer Government's statistical Exhibit No. 101 into evidence.

Mr. McKay: No objection.

(Marked GSX 101.)

Q. Mr. Mitchell, Pan American's growth since those [fol. 24] early days has been worldwide in scope, has it not, while Panagra has continued to operate in the same areas it did several decades ago?

A. Yes, that is correct. I think that the growth of the Pan American system on a worldwide basis as opposed to Panagra's continuation in the same general area in which it started can be shown by three maps which I have here.

This first map shows the routes of Pan American and Panagra as of the end of 1930, and they were developed from information provided to us by Pan American and Panagra at our request.

The red line shows Pan American's route at that time and the dashed green line is the route of Panagra.

You will see that Pan American at that time, the end of 1930, covered the Caribbean area and went down along the east coast of South America to a point a little south of Rio de Janeiro, while Panagra extended from the Canal Zone down the west coast of South America into Chile and across the Andes to Buenos Aires. Pan American had not yet reached Buenos Aires at that time. In fact, about a year before this, Panagra had already obtained this route structure. Panagra, a year before, was about the [fol. 25] same as it is now, it was running all the way to Buenos Aires, while a year before this chart, at the time of this chart, Pan American only went into Gandia and was only a few months before this, the date of this chart, that Pan American had extended its route that far. So that as of the end of 1929 Panagra was the longest, had the longest international air route of any air carrier in the world, much longer than Pan American.

Here is a chart which compares the two companies eight years later, in 1938. It shows that Pan American had by that time extended its route clear down to Buenos Aires and taken in certain other points in South America and in the Caribbean and, in addition, it had already gone into

other areas outside the Latin American areas. It had moved across the Pacific. It had gone up into Alaska, and had a route into the Atlantic, out to Bermuda.

Panagra, on the other hand, had basically the same route structure that it did back in 1929 and 1930, with some extensions within that route.

The terminal, the northernmost terminal of Panagra, was still Balboa, and the southernmost point was Buenos Aires.

[fol. 26] We will see what the two companies looked like in 1957, about 20 years later. You will see now that Pan American criss-crosses the entire world with routes all around the world, while Panagra is still in the same general area.

[fol. 41] Q. Do you have any figures on the participation of Panagra with Pan American?

A. Yes. Between the United States and South America in the period 1950 through 1957 Pan American and Panagra participated in carrying three-quarters or more of the traffic using participation as I have defined it.

I have also broken that down to show the participation by Pan American and Panagra in what is called Eastern United States, which is a band of states, as you can see on this map here, along the coast of the United States which takes in approximately 16 states in a band of some two or 300 miles along the coastal area of the United States.

[fol. 42] Over two-thirds of the traffic moving between the entire United States and South America originates in this Eastern area, or the traffic moving from South America to the United States is destined for that area.

It is therefore a very high generating area so far as traffic is concerned.

Q. Do you have the extent of the participation of Pan American and Panagra in that traffic?

A. Yes. Between the United States and Eastern United States Pan American and Panagra have carried about nine-tenths or more.

Q. Between South America and the Eastern—

A. Between the entire South America and Eastern United

States. Eastern United States is the area, of course, where Pan American and Panagra generate most of their traffic.

The remaining exhibits, 10 through 30 in this section you asked me about compare traffic between the United States or Eastern United States with three areas of South America which are illustrated on this map. These areas are also indicated in Exhibit GS 2 in the document that I have before me.

The red line separates countries in South America into Eastern and Western South America. The division between [fol. 43] Eastern and Western South America was made after an examination and consideration of the areas in which Panagra is operating or can serve in a general way.

I can illustrate this by showing you that the blue pins in here are all the points at which Panagra picked up passengers on original journeys in South America, and they are all to the west of this red line which I have used as a division. It includes the countries of Ecuador, Peru, Bolivia, Chile, and in some of the earlier years Panagra did participate in carrying a few passengers into Argentina, but they have not in recent years; at least they have not been loading people at points in Argentina except at Buenos Aires which is served by both Pan American and Panagra.

Panagra is certificated to operate in certain points in Argentina but is not doing so because of local conditions down there.

Q. Did you say they both served Buenos Aires?

A. Yes, sir.

Q. Can you give us the percentage of American passengers carried on certificated flag carriers between the United States and Buenos Aires which was carried by Pan American [fol. 44] can and Panagra or either one?

A. Yes, sir. Those are shown in Exhibits 24 through 30 of the period 1950 through 1957, and throughout this period over nine-tenths of the passengers were carried with Panagra or Pan American participation.

Throughout most of the period Panagra, primarily in participation with Pan American, participated in carrying more than one-half of the passengers, while Pan American with no Panagra participation carried about two-fifths of

the passenger traffic between the United States and Buenos Aires during that period of time.

Of course now Panagra operates by the Western route and Pan American by the Eastern route. Panagra must connect with another airline at Balboa in order to carry passengers into the United States, which is another reason why Panagra must participate with another airline, and 90 percent or more of that participation is with Pan American.

There is one other area that I have not yet mentioned that is in Western South America, and that's what I have called Western Colombia which for all practical purposes [fol. 45] is traffic to the United States or from the United States and Cali, Colombia. It embraces, as a matter of fact, three departments of Colombia which are specified in the exhibits. They are the departments of Valle del Cauca, Cauca and Narino, and any passengers who originate in the United States and fly to a destination in those three departments would be counted in Western South America. However, practically all the traffic is to Cali which is the northern part of this area and the only point at which Panagra serves in Colombia.

People can fly from some point in the United States to Cali and then take some other airline, like Avianca, to a point below Cali, which is the reason I embrace the entire area there rather than just stopping with Cali.

Similarly, Avianca can compete with Panagra by carrying passengers entirely to some point within Western South America, but they would not, of course, be included in the OD surveys unless they participate with some other U. S. Flag airline, but they would compete with Panagra in the foreign flag statistics.

The red pins are points at which Pan American had passenger originations in the year 1957, according to information that they submitted to the CAB, and you will see [fol. 46] that they are all well to the east of the dividing line that I have set up between the two areas.

This area setup is not a comparison of one airline against another. It is a comparison of the generation of traffic in one area moving to another area. It is not a comparison of the movement of traffic between the United States and Rio de Janeiro, for instance, on Braniff.

Panagra can't get into Rio de Janeiro. They cannot get into Bogota. Panagra cannot get into Asuncion. Therefore these areas cannot be served by Panagra and should not properly be included in an area that Panagra serves.

Panagra has repeatedly stressed before the CAB that it cannot serve Bogota on traffic between the United States and South America. They have an application before the CAB now, unless it has been recently acted upon—I am not positive whether it has or not—in which they say they cannot compete with Bogota traffic, and therefore it would have been very erroneous on my part to have included Bogota as an area served by Panagra or an area that could be served by them.

[fol. 47] Q. In Western Colombia, you mean?

A. In Western Colombia.

I have put Paraguay in the Eastern part of the United States because Pan American is certificated to carry passengers there, although it has not in recent years, although it has indicated to the CAB that it plans to have a non-stop flight operating very shortly between Caracas and Asuncion, so that is Pan American's territory. Panagra does not get into there.

Now, as I think we have already indicated, the third area that I set up was Buenos Aires because that is the area that is served by both Pan American and Panagra.

Q. Panagra coming down the West Coast and Pan American coming down the East Coast?

A. Yes, sir. So this is a division of South America into areas served by the individual companies, Pan American and Panagra, or competing against each other in the third area at Buenos Aires.

Q. Are you through with the map, Mr. Mitchell?

A. We might leave the map there if you want me to discuss the traffic that actually moved between these different areas.

[fol. 48] All right. Well, turn your attention, if you will, to Exhibits GS 32 through 66.

A. Yes, sir.

Q. Which deal with passenger traffic on United States Flag and foreign flag carriers, and tell us what they show, please.

A. These are statistics that combine the United States Flag figures from the OD survey of the CAB with the INS statistics for foreign flag carriers, and I think I have made it clear that there is no other organization that collects statistics on foreign flag traffic between the United States and South America comparable to that—exactly like that compiled by the CAB.

However, I think the INS statistics are the best available that can be used along with the CAB figures in order to arrive at an approximation of the total traffic that is carried by air between the United States and South America, and by comparing Pan American and Panagra's participation against this total we can see where they stand in the traffic picture.

Would you like me to explain what some of these results are?

[fol. 49] Q. Yes.

A. As shown by these exhibits 32 through 66?

Q. Yes.

A. Exhibits 32 through 37 show the passengers carried between the United States and South America on U. S. and foreign flag lines in the years 1952 through 1957, and on the basis of this information it appears that Pan American and Panagra have participated in transporting somewhere around one-half of the passengers, the foreign flag airlines carried around one-third of the total, and the remainder of the traffic was divided among other U. S. Flag airlines that had no Pan American or Panagra participation.

Q. Can you tell us, Mr. Mitchell, in that connection approximately how many airlines participated in the traffic that was not carried by Panagra or Pan American?

A. Well, I am sure that is going to be very carefully brought out in the course of this trial as to exactly how many would participate.

In 1957 there were at least eight foreign flag airlines that [fol. 50] carried traffic all the way between the United States and South America. There were other participating lines in between, as I am sure will be brought out by others. You can add to that the many other airlines that are involved in this traffic on a participation basis. But so far

as through traffic is concerned, one-plane traffic, I would say there were probably eight foreign flag airlines and two other United States airlines that had through-flight traffic between the United States and South America in 1957.

That means then that half of the traffic that is not participated in by Pan American and Panagra is divided into eight or ten or more ways.

Q. Yes, sir.

A. So that when a pie is divided that much you are going to have rather small slices for the remaining companies after you have accounted for Pan American and Panagra.

And in addition I might point out that, at least two of the foreign flag airlines are affiliates of Pan American: Avianca, for instance, which is a very important foreign flag airline flying between the United States and South America, is controlled about 38 per cent, I believe—at least [fol. 51] it was as of the end of 1957—and Avensa is another airline which carries passengers between the United States and South America which is controlled at least 30 per cent by Pan American as of the end of 1957.

There are other airlines operating in the South American area that are also controlled to some extent—foreign flag airlines that are controlled to some extent by Pan American.

Mr. Peck: Would you mind having him say what he means by "controlled"?

The Witness: I am simply referring to the share of the stock held by Pan American which I indicated is approximately 30 per cent as of the end of 1957 for—

Q. Avensa?

A. —Avensa, and about 38 per cent for Avianca.

Q. You have discussed GS 32 through 37. Will you get to GS 39 through GS 66?

A. Yes. The next group of exhibits 39 through 44, shows the passenger traffic carried between the United States and four Western South American countries on U. S. and foreign flag lines.

The INS statistics are not available for individual cities. They are only available on a country basis. Therefore, I [fol. 52] could not segregate out this section of Colombia where Panagra serves, and I eliminated it from my com-

parison in Exhibits 39 through 45, and only dealt with Ecuador, Peru, Bolivia and Argentina, and traffic between the United States and those four Western South American countries was participated in to the extent of about one-half of Panagra in the years 1952 through 19—excuse me.

Q. You meant Chile instead of Argentina, didn't you, Mr. Mitchell?

A. I am sorry. The four countries are Ecuador, Peru, Bolivia and Chile.

Q. Yes.

A. Argentina I treated separately because it is nearly all Buenos Aires traffic.

Coming back, I want to correct that one-half of the traffic being participated in by Panagra to the year 1957 only, and in the years 1952 through 1956 Panagra carried somewhere around three-fourths of the passengers on a participation basis.

Between the United States and seven Eastern South American countries, which run from Venezuela through the three Guianas, Brazil, Uruguay and Paraguay, Pan American [fol. 53] can, without any participation from Panagra, of course, carried about two-fifths of the traffic in the period 1952 through 1957.

And now I treat Argentina separately, since practically all the traffic between the United States and Argentina is concerned with Buenos Aires, and for all practical purposes you can consider these figures to be traffic figures between that city and the United States. Pan American and Panagra shared in approximately three-quarters of the traffic moving between Argentina and the United States carried by all United States and foreign flag airlines.

Colombia had to treat as a whole, and therefore we will have a mixture of traffic carried by Pan American and Panagra as well as the foreign flag airlines, and we find that Pan American and Panagra participated in carrying around one-third of the traffic in the 1952 through 1957 period.

Foreign flag carriers accounted for about three-fifths of the total. Most of this foreign flag traffic was accounted for by Avianca in the year 1957 which, as we have already pointed out, is owned 38 per cent by Pan American. So

[fol. 54] that Pan American, Panagra and Avianca would possibly account for somewhere around nine-tenths or more of traffic moving between Colombia and the United States.

Q. Does that finish you with that map, Mr. Mitchell?

A. Yes.

The Court: Would you like a recess now?

Mr. Kenney: Yes, sir, if you don't mind.

(Short recess.)

By Mr. Kenney:

Q. Will you please now describe what is shown by Exhibits GS 66 through 72 on the next section? That is the section concerned with passenger traffic carried by carriers in sea liner service?

A. Yes, sir. First of all, I think I might use this map to explain what sea routes are covered by these exhibits.

This is a Maritime Administration map showing sea routes operated throughout the world which are called trade routes. I have colored in blue here, which may be a little difficult to see, trade route No. 2, which extends along the East Coast of South America. Grace Line is a liner operator on that trade route.

Trade route No. 25 extends along the Pacific Coast of the [fol. 55] United States and along the West Coast of South America.

Trade route 31 operates between the Gulf of the United States and the West Coast of South America.

Q. You mentioned trade route No. 25. Does Grace operator on that trade route.

A. Grace operates on 25 and 2 on its traffic to the West Coast of South America, while its affiliate, Gulf & South American Steamship Company, operates on trade route 31 which also serves the West Coast of South America.

These statistics show the share of the passenger traffic in liner service carried by Grace and its affiliate on these trade routes. In the years 1954 through 1957 Grace and its affiliate carried 90 per cent or more of the passenger traffic by sea on these three trade routes combined.

Q. Does that apply to both United States and foreign vessels, do you know?

A. That includes United States and foreign flag lines combined. Ninety per cent or more was carried by Grace or its affiliate. The great bulk of these passengers come [fol. 56] from the Eastern Seaboard on trade route No. 2.

Q. Could you tell us what percentage comes by that trade route, if you know?

A. Grace is the only United States Flag airline—is the only United States sea carrier in liner service that carries passengers on trade route 2 here.

Q. As compared with the other two trade routes, could you tell us what percentage is carried over trade routes?

A. I think it is about four-fifths of the total passenger traffic that is generated on that one trade route out of the three.

Grace carries all of the United States Flag traffic in liner service on trade route 2 here from the East Coast of the United States to the West Coast of South America, except in 1952 when the percentage was 81 per cent. It has been well above 90 per cent in recent years.

Grace operates a combination ship service on this route, while on the other routes only freighters operate which carry limited passenger traffic.

Q. Do Grace and Panagra appear to have been in competition with each other in carrying passengers between the [fol. 57] Eastern part of the United States and the Western part of South America?

A. I think there is an indication that they have. We have put on this map the through-flight one-plane service route on which Panagra participates with Pan American and National Airlines which will carry passengers all the way from New York on the same plane to points along the West Coast of South America and on over to Buenos Aires.

The black dashed line here is the segment of that route which is operated by National Airlines, the red line is that portion operated by Pan American and the green dashed line is that section operated by Panagra.

It is the same plane all the way, of course. It is simply that different airlines are responsible at different points along the route, and you can see that a passenger at New York who wants to leave New York to fly to points along the West Coast of South America has a definite choice be-

tween whether to take the steamship line of Grace or fly on this one plane all the way to a point in South America.

[fol. 58] Q. Is that where most of the Grace passengers come from?

A. In 1957 all of Grace's passengers on trade route No. 2, got on or got off at New York. There has been an occasional passenger in the past who has gotten on at other points along the East Coast, but Grace discourages that; and, if you were to walk into a Grace office and try to get passage at any point other than at New York, they would tell you that they will not do it, as they told me once.

Therefore people must get on Grace at New York according to my information from the Grace Line, and they will get off at points along the West Coast of South America.

If I may have this other map, I would like to illustrate how this competition between Grace and Panagra can exist. This is the map that we had up before when I described the different areas in which the airlines operate. I did not explain what these yellow pins were. That is Grace's trade route No. 2. It is the most important trade route along the West Coast of South America.

The yellow pin up here is the point at which passengers can get on the Grace Line vessel, and the yellow points [fol. 59] along here are at places and points where they disembarked in 1957 according to Maritime Administration records.

Grace serves other points on a freight basis, but in this year those were the only points at which passengers got off or got on and traveled back up to New York.

Q. Does Panagra also serve some of these points?

A. I think that is very clearly evident here by the location of the blue pins which are places where Panagra picks up or starts passengers. You will see that these two points here are very close together. One is Valparaiso and Santiago and San Antonio. Santiago is served by Panagra, and Santiago and San Antonio are served by Grace.

Q. You mean Valparaiso?

A. I am sorry. Valparaiso and—

Q. San Antonio.

A. —and San Antonio are served by Grace and Santiago by Panagra. Antofagusta, which is served by both, and

Lima, Peru which is served by Panagra is only eight miles from Callao, which is a principal port served by Grace in [fol. 60] Peru. I am only mentioning the more important points where the great bulk of the passengers get off. There are other points like Arica, Mollendo. Arica is served by both Pan American and Grace.

Q. Panagra and Grace?

A. By both Panagra and Grace, yes, and Mollendo in Southern Peru is served by Grace, and there is Arequipa which is served by Panagra.

Then moving north we have Guayaquil which is served by both Grace and Panagra, and we have up here in Colombia, Buenaventura which is the seaport which serves Cali, Buenaventura being served by Grace and Cali by Panagra.

All of the passengers in 1957 got on at New York on Grace's trade route No. 2, the points in Western South America. Or, if they got on at Western South America, they all got off at New York.

It is in New York and the vicinity of New York, therefore, that you would find the greatest competition between Grace and Panagra for moving passengers between the United States and points along the West Coast of South America.

I did not limit Panagra's passenger originations, that [fol. 61] is, passengers who travel with Panagra participation, to just points at New York, at or near New York, but I have looked at an area which I call Northeastern United States which runs all the way out to Ohio and takes in Maryland, the District of Columbia and all states to the north, all the New England states, as points of origin in which passengers could give serious consideration as to whether they would fly to South America with Panagra participation or take a Grace Line ship to some point along the West Coast of South America.

Over 55 per cent in September, 1957 of Panagra's traffic to South America originated in this area. That means the people got on their plane in that area. It could be that people might have moved from Chicago into that area by train or some other method and took a plane from New York to South America. However, it is the majority of traffic on Panagra and it is the traffic area in which the

people could give most consideration to which mode of traffic they wanted to take.

I have another map to illustrate the South American areas where Panagra and Grace compete to the greatest extent.

[fol. 62] I have spotted with yellow pins five cities at which Grace discharges or picks up passengers along the route in South America. These are Valparaiso, Antofagusta, Callao, Guayaquil and Buenaventura. Those five points account for about nine-tenths of all of the passenger traffic on Grace Line's route No. 2 from New York to South America or from South America to New York. When I refer to South America, of course, I am talking about the West Coast of South America.

So these are the five most important points and account for, all but 10 per cent or less of the passenger traffic on that trade route No. 2 carried by Grace.

Near these cities are cities served by Panagra which are indicated in blue. Here is Santiago, Antofagusta is served by both, Lima which is very near Callao, and Guayaquil which is served by both, and Buenaventura which is not far from Cali.

I have compared the traffic that has moved from Northeastern United States to those specific points by each of the two carriers in Exhibits 79 through 81, and you will see that from an examination of the figures alone, for instance, in Exhibit 79, that Panagra carried 224 passengers between Northeastern United States and Santiago.

Q. That is per month?

A. Per month, in 1957, while Grace carried 121 passengers between Northeastern United States and Valparaiso which is not far away.

There is very good train service between Valparaiso and Santiago, and a passenger has his choice as to which service he wants to take in traveling between those points.

If we look up in Peru there, Panagra carried 484 passengers per month in 1957 to Lima, and Grace carried 108.

In Guayaquil Panagra carried 130, Grace 16.

At Buenaventura we have Grace with 20 and Panagra went to Cali with 108.

Those figures do not indicate that Grace's traffic is insignificant in relation to that of Panagra in serving these points, and I have only taken five points. I have not attempted to compare other points where people may get off and travel to the same final destination after they leave the Grace ship.

If I didn't mention that, I want to point out, too, that these five points account for these—these five Panagra [fol. 63a] points that are shown here account for about 90 per cent of Panagra's traffic between Northeastern United States and these four West Coast countries of South America.

[fol. 64] Q. I didn't think of doing that. I am glad you pointed that out.

A. In other words, for both Grace and for Panagra, those spots account for 90 per cent of the traffic.

Q. Mr. Kenney, let us turn to cargo and mail traffic that are presented in the document. What do your exhibits show with respect to the growth of overseas air cargo in recent years?

A. In Exhibits 82 and 83, they show that there has been a very substantial growth in recent years in cargo traffic overseas.

In Exhibit 82 you can see that overseas cargo carried by air into and out of New York more than double from 1953 through 1957. In the segment of this traffic that was destined for Latin America, or came from Latin America, it increased by two and a half fold during that period of time.

In Exhibit 83, which is concerned with traffic in and out of Miami, traffic doubled in the period 1952 through 1957, that is, cargo carried by air into and out of Miami.

In the year 1956 to 1957 there was an increase of more than 25 per cent at Miami between these—from that point. [fol. 65] Now, in Exhibits 84 and 85 the share of the Latin American traffic that is carried by Pan American and Panagra is indicated. We couldn't get, for individual airlines, the volume of freight carried from one point to another on a very extensive basis, so that in Exhibit 84 the comparison is confined to all operations of Pan American's Latin American division and each of the other airlines that

operate in that area which have been certificated by the CAB. In other words, this tabulation is confined to U.S. flag airlines.

Q. Do you have any exhibit which would show the relation of the growth of cargo traffic by air to that of cargo traffic carried by sea service?

A. Well, I have an Exhibit 100 here—

Q. Specifically referring to South America, what does your Exhibit GS 86 show?

A. That exhibit deals with all traffic carried in liner service between the United States and points in Latin America, and it showed that from 1952 to 1957 there was an increase of around 20 per cent in the cargo carried by sea as opposed to those increases that I referred to, over 100 per cent, for the air traffic moving into and out of [fol. 66] New York and Miami.

Q. Mr. Mitchell, could you tell us how Pan American compares with the other United States flag airlines in the movement of cargo in South America?

A. Yes. Exhibit 84, Pan American carried about two-thirds of a ton miles of freight, express and mail carried by all U.S. flag certificated airlines that operate in the Latin American area. There are—11 other carriers, I believe it is, other than Pan American and Panagra that operate in that area.

Panagra carried about six per cent of ton miles of passenger—freight, express and mail, giving you nearly 70 per cent for Pan American and Panagra combined.

The nearest competitor of Pan American was Riddle, which was only about one-fifth the size of Pan American's Latin American division on the basis of the traffic figures that I have described.

Q. Mr. Mitchell, I believe you testified that the Panagra carried about 6 per cent of the freight and mail. That is not accurate, is it?

A. That is in the entire Latin America area, in relation to the total ton miles of freight, express and mail carried by all U.S. certificated flag airlines that serve Latin [fol. 67] America.

Q. Doesn't Panagra carry about 13 per cent of the mail?

A. Mail alone, 13.5, as shown in the exhibit.

Q. You were speaking of everything, all three?

A. I was speaking of everything. Freight, express alone is 5.6 per cent. The combination is 6.4.

Q. Could you tell us how much of the cargo carried by sea in liner service between the United States and the west coast of South America is accounted for by Grace and its affiliate?

A. Only three routes I described, from all the major posts of the United States to the West Coast of South America, Grace and its affiliate accounted for about two-thirds of the imports and for about one-half of the exports during the years 1954 through 1957.

Q. Can we refer specifically to trade route 2?

A. Yes, on trade route number 2, which accounts for the bulk of that traffic, Grace carried about three-fifths of the liner service traffic in the 1951 through 1957 period, including in the total that I am comparing that with all foreign flag ships that operate in liner service. In the case of exports, Grace accounted for about half of the liner service exports in the 1951 through 1957 [fol. 68] period. The remaining half was divided amongst at least five other ships—ship operators, the largest of which was not a third the size of Grace.

Q. Isn't it true that on trade route 2, from the Atlantic coast of the United States to the west coast of South America, that Grace accounted for all the American flag liner traffic?

A. I believe that is correct. I would like to check that to make sure, if I may. I know they carried all the passengers.

Yes, in all those years, exports or imports, Grace was the only United States flag operator on trade route number 2 in liner service.

Q. Do you have any statistical information which would indicate at all that any significant competition is developing between Grace and Panagra in the transportation of cargo between the eastern part of the United States and the west coast of South America?

A. My last five exhibits are intended to present information that would assist us in that respect.

Exhibit 97, I have listed all the points at which Panagra has loaded traffic in the South American area, and I have

indicated by an asterisk the same areas or cities or nearby cities that are served by Grace. There is a similar table [fol. 69] for Grace, in Exhibit 99, which shows the points at which Grace picked up or discharged cargo from the east coast of the United States or to the east coast of the United States and the corresponding points that are served by Panagra.

Now, Exhibit 98 does contain some data on cargo carried by Panagra between certain points between the United States and certain points on its route in South America. Miami is the only point, however, for which such information was available.

In Exhibit 100 I have compared that traffic carried between these particular points in South America with the Miami traffic, carried by Panagra, and amount carried by Grace between the same points and any point along the east coast of the United States. Grace is substantially larger than Panagra but it does indicate that there is developing some cargo competition between Grace and Panagra.

Q. Panagra just started its cargo service in 1957?

A. That is right.

Q. In July.

A. These figures are for 1957, and Grace only started its all cargo operation in the middle of that year.

Q. Panagra only started?

[fol. 70] A. Panagra.

Mr. Kenney: That is all.

[fol. 72] L. PETER CORNWALL, called as a witness on behalf of the Government, having been first duly sworn, testified as follows:

Direct examination.

By Mr. McConnell:

Q. Mr. Cornwall, by whom are you employed?

A. I am with Pan American World Airways.

Q. In what position?

A. I am the cargo sales manager for the United States.

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[fol. 75] Preliminary cross examination.

By Mr. McKay:

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[fol. 78] Q. Are you familiar with and have you had any experience in the air cargo movement to the west coast of South America as distinguished from the movement from the United States to the east coast of South America?

A. I have had general experience, yes.

Q. What has that general experience been?

A. In line with my normal duties as cargo sales manager.

Q. But you have no particular knowledge about that—

A. No.

Q. --movement?

A. No, sir.

Direct examination (continued).

By Mr. McConnell:

Q. Could you briefly describe the air cargo operations of Pan American? In a sort of brief way.

A. Well, it has grown tremendously over the past three years, which is a matter of record borne out, I think, by some figures that we have here. So far as air cargo is concerned, we have come a long way. We have gotten away from the purely emergency type of shipment. We are [fol. 79] moving into bulk commodities. We are pretty well into that. We operate any number of fairly—good number of all cargo aircraft for the handling of bulk commodities, I would say.

Q. Could you describe some of the commodities of that character?

A. Well, we carry a good deal of livestock, we carry a good deal of consumer items, such as refrigerators and electric fans, and that sort of thing. We carry some new furniture; a good many household effects, used furniture,

people moving back and forth. We carry automobile parts, aircraft parts, machine parts of various sorts which are other than, perhaps, pure emergencies. The list is very long. We have at least a hundred items.

Q. Would you say that you have expanded that type of carriage a great deal in the past few years? Do you have any figures on that, just to the extent to which you have?

A. Pan American's cargo revenue in 1946 was only nine million dollars, nine and a half million dollars, approximately. By 1950 it had gone up to fourteen million. In 1950 to twenty million plus. And in 1958, the figure I have here is \$33,400,000, rounded, which indicates the rate of growth. [fol. 80] I have no doubt that it should exceed that amount this year.

Q. In terms of tons, do you have any figures?

A. I don't have ton miles figures. We did pass 100,000 ton miles this past year, however. We topped that.

Q. What percentage of this traffic that you are referring to, is in what we would call the North American-South American trade?

A. In so far as my cargo sales in the United States are concerned, historically, that is to say, in recent years, a little more than half of air cargo revenue we have created here in the United States has been in connection with South American cargo, Latin American cargo.

Q. Do you have a pretty good back haul of that cargo?

A. In the past it has not been, but the back haul situation is improved now.

Q. From your point of observation would you say that there is an active area of competition there in international trade between air carriers and ships?

Mr. McKay: I object on the ground that the question obviously calls for a conclusion by this witness.

[fol. 81] The Court: I will permit him to answer. You have an exception.

A. I would say—

Q. Do you have an opinion?

A. Well, yes. I believe there is an active area of competition between surface and air at the present time.

Mr. McKay: May I please have the answer read? I wasn't able to hear it.

(Record read.)

Q. Would you explain, generally, the nature of this competition, pointing to the various factors which enter into the choice of either the one form or the other?

A. As I had said earlier, we are well beyond the purely emergency type of traffic that had been the mainstay many years ago. We are now into regular movements of traffic, in some cases very substantial movements, which are sold and generated primarily on the economic basis, that is, on the direct comparison of all the costs related to distribution by one means as compared with all the costs of distribution by another.

Q. Will you spell that out?

[fol. 81a] The Court: Before he does, it is almost one o'clock, we should adjourn now. Is an hour enough?

Mr. Kenney: Rather an hour and 15 minutes or an hour and a half would be preferable to us.

The Court: Is that agreeable to everybody?

2:15.

(Recess to 2:15 P.M.)

[fol. 82]

AFTERNOON SESSION

(2:15 p.m.)

L. PETER CORNWALL, resumed.

Direct examination (continued).

By Mr. McConnell:

Q. Mr. Cornwall, before the recess you testified to the fact that from your point of observation there was active competition between steamships and the airplanes as far as cargo was concerned, and then you started in with the explanation of some of the factors that go into the choice

of one mode over the other. Could you go forward with that, please, sir?

A. Yes, sir. I have here some papers of my own which are taken at random from the work of our various cargo sales representatives in the field which show the type of expense that they go into in making comparisons of surface and air. Sometimes these rather exhaustive comparisons are favorable to air and sometimes they are not.

You have export packing by surface. That is essentially a surface cost more times than not. You have various port charges by surface which don't apply, at least in the same [fol. 83] degree, to air. You are apt to find forwarders' fees are higher by surface and more numerous in some instances. Consular fees are sometimes higher by surface. Insurance is usually higher by surface, so we include that always.

There are very often carriage charges by land, overland, associated with steamship shipments, such as rail to the port or truck from the port to an inland city or something of that sort. These may or may not apply by air. Usually they would not because there is an airport nearer the point of origin of the goods.

Q. Do you have in mind a typical situation where that factor comes into play.

A. Well, you would perhaps find it—well, let's see. In Colombia, for example, Bogota is inland. The steamship doesn't get up to Bogota. It doesn't get quite up to Lima and various other cities in South America. That is, there is an area, perhaps rail or highway, between the port area and the true destination of the goods.

Q. What about, say, for example, in the European trade where you have all these interior points? Does the fact of the surface haul after the ship—

A. That is always a consideration. Let's say the haul [fol. 84] in from Hamburg or Antwerp into Munich or Vienna, into Switzerland, something like that; that is always a consideration, and it may, in combination with other things, make air desirable. It is particularly pronounced, however, in the backward countries, the so-called backward countries, the Middle East and certain South American countries.

European ground transportation is excellent by and large.

In a very few circumstances duty at destination will be different by air and by surface depending on the rules of the particular country relating to assessment on a gross basis or something of that sort.

Then there are some pretty abstract but, nevertheless, important factors that are recognized by our clients, such as the interest charges on the goods while in transit or the interest charges in the high level of inventory required at destination in anticipation of surface shipping. Those interest charges can be a real factor.

Q. Will that apply to automobile dealers and men of that sort?

A. Well, it could apply to automobiles certainly, but [fol. 85] automobile parts. I'd say generally parts is the more important thing, particularly where you have many models from many past years and that sort of thing to keep in stock.

Q. Just go ahead.

A. I will give you a couple of examples of these. We have one that intrigues us at the moment considerably. We have a man at Boston who has been giving us, oh, anything from a few hundred up to a few thousand pounds a week of automobile parts for Germany. This has been going on now, I'd say, for something over a year. Actually he ships—he states, and we believe him—something in the neighborhood of ten to 15,000 pounds of parts a week.

We have only gotten the more important, the more necessary, the more urgent parts, because our rate, in combination with the other costs, was not competitive with surface, particularly on an excellent trade route such as from Boston to Europe.

On May 1st, however, our rate applicable to this particular traffic dropped down from 55 cents a pound to 37 cents a pound. This is quite a dramatic reduction. The [fol. 86] net result is that the cost analysis worked by our people in Boston shows that for a given shipment, which happened to have an invoice value of \$1,780, considered typical, air in the past would have cost \$570 as against surface of \$415.

Now with these new charges you come out to \$384 as being the new air charge; in other words, a saving of

roughly \$30, \$35 over the steamship. It is too soon to tell, but we rather hoped that this man would see fit to put his entire merchandise up in the air.

That is a lucky one. We have a great many that are unlucky. Here is one where we didn't work out at all well. This is well known to all our competitors, and I am afraid it is water over the dam now.

It concerns jet engines from England to California and, to some extent, up to the Boeing plant at Washington. We worked a very careful cost comparison which was concurred in by the consignees who were paying the charges on this shipment. That is to say, they agreed with our reasoning; they agreed with the numbers that we had put down as [fol. 87] representative of the shipment of jet engines.

So for a given quantity—it happened to be 5,500 pounds—we figured a cost of \$2,318 on the basis of using deferred air freight within the United States plus our own commodity rates trans-Atlantic. This is as low as we could get.

We felt, because of certain collateral benefits upon which you could not put a price, that the business would move air despite the fact that the steamship costs showed out as \$3,178.

However, effective in March, I believe—I do not have the date of the tariff reference, but I know that we have lost the business because of the effect in March of a new and reduced steamship rate which was of sufficient incentive to put this business firmly on the surface.

Q. Did you formerly have the business?

A. I beg your pardon?

Q. Did you formerly have the business before they lowered the rate?

A. No, the entire business was in prospect of movement of these Rolls Royce jet engines to be installed in DC-8 and Boeing aircraft. So the business never moved, but we had all known it was going to move.

[fol. 88] Q. Do you have any other comparative illustration?

A. Here is a fairly typical shipment of refrigerators and freezers, in two bids, from Connorsville, Indiana, to Barbados, British West Indies. Here the surface charges show out at \$892 and the air charges show out at \$881, a very

close margin, but still very possibly one that would be persuasive in moving this cargo by air.

Q. You haven't moved that?

A. This particular traffic is—has moved but in the particular quantity shown here. This is rather high quantities.

Q. Did you move it?

A. Yes, we have moved traffic from this company to Barbados, different quantities.

Q. Do you have any other illustrations?

A. Somewhere over a year ago, my recollection is it would have been during the summer of 1957, we completed some cost analysis, cost comparison work, which showed that certain electric devices for the home could be moved into Venezuela at a slightly lower unit cost by air than was possible by surface at that time. This business started to move from two very large firms here in the United States to Venezuela in very satisfactory quantity from [fol. 89] our point of view until in February, 1958, a new steamship rate was put in, and I have it here. This rate dropped the steamship cost from \$39 to \$20 a ton for refrigerators and from \$35 down to \$20 for washing machines, to major commodities. This naturally took us out of the business.

Q. Is that a commodity rate which is put into this one plan?

A. It was a surface commodity rate.

I can recall we have lost business to surface carriers for other reasons. Some years ago there was a very substantial and continuing movement of nylon stockings to Europe before the mills had either the materials or the techniques, apparently, to make them, and we lost this business because the steamships were able to come up with better security on their ships. The big problem had been pilferage. So, there are other than rate reasons occasionally for losing business.

Household effects is very often favorable to air; one of our big commodities.

Q. Have you had any direct competition with respect to the price in the movement of household goods?

A. Well, since new traffic is a large part of our concern,

since most new traffic comes to us on the basis of freight, it is [fol. 90] correct to say that certainly price has had an effect on moving household goods by air. Again, it is not purely the rate. It includes many other factors, such as the packing, which is a big thing. You don't need the things packed for air as you need by surface.

Q. Can you think of any other specific, drawing on your experience, instance in which the steamships have undercut something?

A. I am sure I could come up with any but I don't have any specifically where a steamship company has specifically undercut us, that I have right here.

Q. You say that the cost element in air is a very important factor in this charge of the two modes. If the air cargo operators could reduce their costs considerably, do you think that would, maybe, increase the business?

A. Yes, it certainly would. The example of from Boston to Germany was a good case in point, where the rate dropped from 55 to 37 cents, and we have every anticipation of having all the business from that particular source.

Q. Most of the airplanes used in air cargo are converted passenger planes at the present time, isn't that correct? [fol. 91] A. There are—

Q. Modified.

A. (Continuing) —the DCS and Lockheed 104TH are essentially cargo airplanes, although they have much of the appearance of passenger airplanes, but they were built as cargo airplanes.

Q. About what does it cost per ton mile to move a typical air cargo now?

A. Well, my concern is less with the cost of moving it and more with the price that I must sell it for. My prices are, in some cases as low as 15 to 18 cents a ton mile, more typically, however, in the neighborhood of 20 and 30, even 40 cents a ton mile, in certain instances. I suppose an average return would certainly be more than 25 cents a ton mile.

Q. Looking at the map here, from your observation of this industry, would you say that, with these routes and contiguous ports of call, in your opinion would there be an

active area of competition between Panagra and Grace Steamship Company?

A. Yes, sir, I would say so.

Mr. McConnell: That is all I have.

[fol. 92] Cross examination.

By Mr. McKay:

Q. Mr. Cornwall, does Pan American make a profit on its all-cargo operations between the United States and the east coast of South America?

A. I don't know.

Q. You don't know whether you make a profit or not?

A. No, sir.

Q. When did Pan American start its all cargo operations to the east coast of South America?

A. I don't recollect for certain. It would have, perhaps, been about 1950, but I don't recollect.

Q. You have been with Pan American all during this period?

A. That is correct.

Q. But you cannot recall. Your best estimate is 1950. From 1950 to this date, 1959 you cannot tell us whether Pan American has made a profit on its all cargo operations from the United States to the east coast of South America, is that correct?

A. I cannot tell you. I don't know.

Q. Mr. Cornwall, Pan American represents Panagra in the United States both with respect to passenger and air cargo, is that correct?

[fol. 93] A. That is correct.

Q. Mr. Cornwall, do you have any criticism of the air cargo operations of Panagra?

A. As regards?

Q. Their efforts to move air cargo between the United States and South America.

A. They have been—

Q. Could you answer that yes or no in the first instance?

A. Exactly what do you mean by criticism?

Q. Do you think that Panagra has made the best efforts it could in the generation of carriage of air cargo, having in mind that you and your company represent Panagra in the United States? And I would like you to answer that question, if you can, yes or no.

A. I would have to answer that question, no.

Q. Mr. Cornwall, what other air cargo carriers are there between the United States and South America, specifying, [fol. 94] if you will, the east coast and the west coast separately.

A. I am afraid I cannot list the carriers for you.

Q. There are any number of them, though, aren't there?

A. There are a great number of carriers.

Q. Both U.S. flag and foreign flag?

A. Yes, sir, a great number.

[fol. 95] Q. Are you familiar, Mr. Cornwall, with the rates charged by surface carriers, namely, the sea carriers as distinguished from air carriers?

A. No, sir.

Q. Are you familiar with the rates that Panagra charges as distinguished from the rates that Grace Line charges?

A. I am—no, no, I am not.

Q. Then, Mr. Cornwall, how can you say there is an active area of competition when you don't even know the rates that one carrier charges as against the other? Hasn't rate a lot to do with whether or not you ship by air or by sea?

A. The rates certainly do—they have a great deal to do with it.

Q. Mr. Cornwall, are you familiar with the total cargo movement between the United States and the east coast of South America, and by total I mean to include both sea and air.

[fol. 96] A. Well, I am aware of the total cargo movement as the rates or any other thing in general terms, that is, I have.

Q. Do you know the ton—pardon me?

A. I have access to statistics, comparative figures, but I don't carry that information in my head.

Q. Have you ever had occasion to refer to the figures that are available to you as to what constitutes the total cargo movement, sea and air, between the United States and the east coast of South America?

A. I have from time to time read reports with particular attention to commodities that we thought at the time might be susceptible to air carriage.

Q. But you have no knowledge at the present time of the total movement?

A. No, sir.

Q. Air and sea?

A. No.

Q. That would also hold true between the Atlantic coast U.S. and the west coast of South America?

A. That is correct, sir.

Q. Have you any idea, Mr. Cornwall, what percentage of that total movement Pan American carries down between the United States and the east coast of South America. [fol. 97] what percentage of the total movement?

A. Of air—of—

Q. Sea and air.

A. Of cargo?

Q. All cargo.

A. I would like to guess that it is less than—

Q. I wouldn't want you to guess.

A. All right, I cannot answer that question.

The Court: You may use the word "estimate."

Q. Have you an estimate?

A. I would estimate that it is less than one per cent. Judge.

Q. Less than one per cent?

A. Yes.

[fol. 102] Q. Isn't it a fact, Mr. Cornwall, that in the past and, generally speaking, up to today the commodities carried—let us restrict it to between the United States and South America—either consist of emergency items, commodities which inherently could not be carried, such as orchids, by steamship, or commodities such as jewels and precious metals which have an inherent value to them but a very low weight? Is that correct?

A. Those are very important categories.

Q. Isn't it the fact that that is the majority of the categories that the airlines carry?

A. I would want to—

Q. By dollar revenue, if I may put it that way.

A. I could not answer that question by either dollar revenue or pound.

[fol. 105] Recross examination.

By Mr. Peck:

Q. You were asked by Mr. McKay something about Panagra, whether according to your observation it was doing the best it could, considering that you were their agent and I understood you to say no. Now I am not interested in pursuing the question as to what you think Panagra is doing or is not doing, but what I would like to make clear is as to whether or not your organization in selling this air freight is doing the best job you know how to do.

A. I think we are, sir.

Mr. Peck: That is all.

* VICTOR B. CARMICHAEL, JR., called as a witness on behalf of the Government, being first duly sworn, testified as follows:

Direct examination.

By Mr. McConnell:

Q. Mr. Carmichael, where is your home, please, sir?

A. My home is near St. Petersburg, Florida.

[fol. 106] Q. What is your business or profession?

A. My profession, business is air cargo transportation, and I am the president and general manager of Aerovias Sud Americana, Inc., certificated U. S. all-cargo carrier.

Q. Roughly what areas do you operate in?

A. Our route pattern is air-freight route 113 stemming from Tampa and St. Petersburg as co-terminals; Havana, Cuba; Merida, Mexico; Belize, British Honduras; Guatemala, Salvador, Panama, Bogota and Quito and Guayaquil, Ecuador. That is our certificated route pattern.

However, we have suspended service to Havana, Cuba for the present, and our operation is direct from St. Petersburg to Guatemala, direct to Salvador, direct to Panama, and from Panama direct to Bogota and then to Ecuador.

[fol. 108] Q. Briefly could you describe some of the commodities that you ship in your trade and operation at St. Pete's?

A. The commodities that we transport by air are most commonly referred to as consumer goods, being the majority of our traffic, supplemented with livestock as a specialty, automobiles, machinery, and most recently household effects, personal effects, and agricultural implements and parts and automobiles.

Q. You would say that it is not confined just to small items; is that correct?

A. No, sir. Our business is a mixture of all kinds of freight.

Q. In your opinion, Mr. Carmichael, from your observations of your operations in Aerovias Sud, would you say there is an active area of competition there between steamships and air cargo carriers?

A. Well, our particular phase of operations I consider most definitely competitive.

Q. Could you give some illustrations of actual situations in which you competed pricewise with the ships for certain cargo?

[fol. 109] A. Well, if I might go back to the early days of ASA, one of the first commodities that we developed into Guatemala was automobiles where we successfully sold the distributor in Guatemala on carriage by air on the basis that the overall costs from factory to distributor were competitive with ocean. These costs are developed on the basis of the surface transport to St. Petersburg, air to the destination which is an interior point in this case, making it more easy to compete, easier to compete

with surface by virtue of a surface haul from the port in Guatemala to the interior.

We handled this commodity as the foundation of our service into Guatemala.

Q. Was there a considerable volume of that traffic?

A. There was a considerable volume, probably as many—frequently as many as two or 300 units a month.

The units were competitive on the basis of weight versus cubic volume. Certain of the vehicles became uncompetitive for air because of the heavier weight. They originally started out with lighter jeeps, and they became so heavy [fol. 110] that then the ocean was able to bring them back.

From there we developed a steady business of automobiles into other markets.

Q. If you will excuse me, did the steamship companies come down in their rates at that time to recapture that traffic?

A. No; at that time the automobiles got heavier so that we were not competitive on a weight basis versus a volume basis for ocean. But most recently, well, within the last year, our volume of automobiles has dropped about 60 per cent because the combination surface, which is steamship and inland transport in Guatemala—the inland transport cut their rates about 50 per cent which gave the advantage back to surface in this case.

But I have with me approximately 50 comparisons of ocean and air which I drew out of the files.

Q. Fifty instances where you have actually competed?

Q. These are on consumer goods. They are not specifically automobiles but all types of commodities.

Q. Can you just at random pick out a few that would be [fol. 111] illustrative?

A. We have developed this concept of ocean-air comparison in about 1954-55. Our sales department will take a specific shipment and compare the surface with air on existing rates at that time.

Here is a case of household goods plus an automobile to Panama in which the total shipment, figuring by ocean, including the dock and wharfage charges, the ocean freight and the export packing ran \$2,191. The shipment weighed 11,640 pounds.

By air—I am sorry. This is a shipment from Panama to the United States, but it is still a good example.

By air that same shipment moved at \$1,514.

Here is a comparison to Guatemala which is a commodity of cabinets and sinks. The shipment originated in Maumee, Ohio, and it weighs 11,983 pounds. The inland freight charges from Maumee, Ohio to the nearest seaport for ocean was \$275. The ocean-air freight or ocean freight was \$1,583, charges at port 50, inland freight charges at destination from port to Guatemala City \$159, and miscellaneous charges \$16 for a total of \$2,344 for that shipment. By air the shipment was \$2,137.

[fol. 112] Q. You got the shipment?

A. We handled that shipment. That is an example of how we developed—

Q. Can you think of another illustration where it is a rather heavy commodity like automobiles?

A. Here is a shipment of typewriters as an example, also to Guatemala, and the shipment weighed 2,750 pounds. Delivered by ocean it was \$1,065 and 40 days transit time. Delivered by air it was \$1,067 in 10 days.

I could go on and on. There is a current shipment of stoves and refrigerators to Panama on which we have developed the ocean-air comparison. It turns out to be a local contractor, and it is so competitive, that is ocean to air, that in the final analysis for a shipment of 91,000 pounds delivered to Panama ocean it was \$35 less to deliver by air than by ocean. And then the steamship line, apparently able to amend their rates or tariffs, have offered a 15 per cent reduction over their existing rates, so it is still in the mill. But that is a current example of how close the competition is.

This is refrigerators and stoves, a rather sizable shipment.

[fol. 113] Q. And the steamships have lowered their rates to capture that business.

A. They have indicated they have.

Mr. McKay: I didn't hear that answer.

The Court: "They have indicated they have."

A. The shipper has indicated that he has had an offer for a discount from the steamship.

Q. Was Grace and Company involved?

A. I do not know if they are involved in this particular instance—

Mr. McKay: Do you mean Grace Lines?

Mr. McConnell: Grace Lines; excuse me.

A. There is a quotation now from the Port of New York which is the conference that I think Grace is in.

Q. It is a conference.

A. I don't know that that quotation has—this discount was offered at Tampa port by a non-conference carrier, to the best of my knowledge.

Q. With your technical knowledge of the airplane itself, as a trained pilot, do you anticipate that in the near future there will be some developments in cargo planes that will greatly reduce the direct and indirect cost of operating the plane?

[fol. 114] A. Yes, I think it is inevitable. I think the industry—the air transport industry, in particular the air freight carriers, know that in order to develop the additional volume which we know is available from surface transport we must have a better developed, better designed aircraft, and I don't think it is more than, at the most, two years away. Certain types will be phased in by then. For our own operation and for different carriers' operations it takes a different type, different range aircraft. We have looked at all existing models and haven't found one yet suitable to our purposes.

Q. In most of the models that have gone into operation, as I take it military requirements are predominant; is that correct?

A. That's correct.

Q. About how much do you think that these new planes will decrease the cost of air operations, in your opinion?

A. Well, I can state from what I know of our business that a rate decrease in cents per pound of, say, 20 per cent, or just state a rate decrease of 20 per cent overall, should double our existing volume.

[fol. 115] These true air freight aircraft offer two advantages. One is the additional speed, and the other is the rear loading feature which is an absolute necessity for

the time factor. Intermediate aircraft, I believe, will be the surplus propeller airplanes.

Q. These new cargo planes that are on the drawing boards, speaking from your standpoint as an air transport pilot in the Burma-India Theatre, would have tremendous use for us in military operations, would they not?

Mr. McKay: Your Honor, I did not hear the entire question. May I have it repeated?

(Question read.)

Mr. McKay: I object, your Honor, as totally irrelevant to the issues in this case, and the witness has not indicated any familiarity with the planes that are on what Mr. McConnell chooses to call the drafting boards.

Mr. McConnell: Well, you can be certain, my only idea, if your Honor please, and we do not want to get far afield, but we might as well face the fact that since the Russians have surrounded us with submarines and from a logistical point of view—

[fol. 116] The Court: Let's try this lawsuit.

Mr. McConnell: That is all I have.

Cross examination.

By Mr. McKay:

Q. Mr. Carmichael, you are president and general manager of Sud Americana?

A. Yes.

Q. How long have you been president and general manager?

A. Since 1949.

Q. Is that when Sud Americana went into business?

A. No. It was organized in 1947.

Q. 1947. Your first contact with it was in '49, or had you been associated with it prior thereto?

A. I was one of the founders.

Q. Isn't it a fact, Mr. Carmichael, that the operation of your company is still in an experimental and development stage? I would like you to answer it yes or no, if you can.

A. No. No would be my answer.

Q. It is not in an experimental stage?

A. It is not in an experimental stage.

Q. Mr. Carmichael, are you familiar with the recommended decision of the chief examiner, Francis Brown, in [fol. 117] the Civil Aeronautics Board that was handed down February 19, 1959?

A. I am.

Q. Have you read that?

A. Yes. If you are referring to the ASA case—

Q. That is right.

A. —that's right.

Q. You are familiar with his recommended decision?

A. That's right.

Q. Do you recall the following sentence which I quote from that decision:

"The operation of this company"—referring to Sud Americana—"in the Latin-American area is still in an experimental and development stage"?

Do you recall that statement?

A. I recall it.

Q. Do you disagree with it?

A. I disagree with the "experimental." I agree with the "developmental." And your question, I believe, was as to whether it was an experimental only. And it is developmental, very definitely, but I don't consider it an experiment.

Q. Mr. Carmichael, is the operation of Sud Americana a marginal one at the present time?

A. Yes, it is a marginal operation.

Q. Mr. McConnell asked you on two occasions, the latter occasion being whether or not Grace Line had indicated it would reduce its charges for surface transportation in connection with a certain instance that you gave. Do you recall that?

A. Yes.

Q. And you indicated there was an indication that the reduction was by a non-conference member; is that a fact?

A. The original—

Q. Is that a fact, Mr. Carmichael?

A. Yes. I indicated that the steamship line competing for this traffic locally is a non-conference carrier.

[fol. 119] Q. You know that Grace Line is a Conference member, do you not?

A. Yes, I do.

Q. So you didn't have Grace Line in mind, is that a fact?

A. I might add that—

Q. Yes or no? You haven't answered my last question.

A. I didn't have Grace in mind from Tampa port.

Q. When you say there was an indication of lower rates, do you have any knowledge of whether any steamship company lowered its rates in that instance that you refer to?

A. We are dealing—

Q. You said you had an indication from the shipper, I believe.

A. We had an indication from the contractor.

Q. But you had no personal knowledge as to whether any steamship company lowered its rate?

A. Only what the contractor informed us.

Q. No personal knowledge yourself?

A. No personal knowledge; other than as reported to me by my sales department.

Q. Mr. Carmichael, you have testified that when you [fol. 120] looked into the future you could foresee a 20 per cent decrease in the cost of air transportation; am I correct?

A. No, I didn't state it that way.

Q. Will you please restate it?

A. I say, looking into the future, year, with a 20 per cent decrease in the present operating cost of the aircraft, that, I believe, I am talking of an overall decrease now in the rate structure, that in our particular area, the traffic would double.

Q. What is the particular area, Caribbean?

A. I described it as central and northern South America, excluding Venezuela.

Q. Your testimony is if you can decrease your—by 20 per cent—your overall cost, you will double your volume. Can you tell us, Mr. Carmichael, that your costs will decrease by 20 per cent in the next year?

A. Any further reduction in costs will be almost entirely

dependent upon the type of equipment applied to the air lift.

Q. Mr. Carmichael, you selected the figure as 20 per cent and, for the moment, I want to stay with that figure. If you care to decrease it or increase it, you may. I am asking [fol. 121] you, on what basis do you predict, if you can predict, that your costs will decrease by 20 per cent in the next year?

A. I think I answered the question by saying if we applied a different aircraft, that will operate at a lower cost per ton mile, in direct flying cost. I am not referring to the overhead of the operation. I am referring to the direct flying cost of the machine.

Q. Your testimony is if you can get an airplane that will have the effect of reducing your costs by 20 per cent you predict that your volume will double, is that correct?

A. I don't want to be indicating that we intend to reduce in the next year the rate structure by 20 per cent. I simply stated, with the proper application of equipment, a 20 per cent decrease in rates, general overall rates into our area of operations, I believe, to the best of my knowledge, and on the basis of surveys that we have made, would double the business.

Q. But you cannot tell us now when this 20 per cent decrease will take place, can you?

A. We haven't planned a 20 per cent increase as yet.

Q. Decrease?

[fol. 122] A. Decrease. I am sorry.

Q. What is the frequency of your operations, Mr. Carmichael, to the various points that you have previously testified?

A. Frequency to Central America is a flight every other day to Guatemala, DC4 aircraft, and alternate days to Salvador, and two to three flights per week to Panama, supplemented by C46 aircraft.

Q. You formerly flew into Havana?

A. Formerly.

Q. How long did you continue that operation?

A. We suspended that operation about a year and a half ago.

Q. How long were you in it?

A. We originally were in Havana before we became a certificated carrier, and then we reinstituted the service when Havana was—when we obtained Havana as a scheduled route. We operated it for about one and a half years.

Q. As a sched or non-sched?

A. As scheduled. However, we were unable to compete effectively with other air carriers based in Miami. That was the reason.

Q. What were those air carriers?

[fol. 123] A. Principally Cuban flight operations.

Q. Mr. Carmichael, do you consider that your rates are competitive with the rates of the steamship companies?

A. In many cases, I do.

Q. In many? In the majority or in limited degree?

A. I would say that 40 per cent—well, possibly 40 per cent of our traffic is competitive with ocean at the present time.

Q. 40 per cent?

A. Bulk.

Q. And 60 per cent is not competitive?

A. It may be competitive. We find it not necessary to prove the competitive position because that traffic is merchandise that has been in there so long, this has proven its value on inventory, replacement, against surface transport and time involved, that we don't find that to be competitive with surface. That is competitive with other air carriers with a service matter.

Q. Let us go back over that, Mr. Carmichael, because I want you to lay down a very positive statement for this testimony. Am I correct in saying that you have testified that 40 per cent of the cargo you move is competitive with [fol. 124] steamship companies, is that correct?

A. Yes. I will make that statement.

Q. What is the nature of that movement of the cargo?

A. That cargo is principally white goods, which are refrigerators, stoves, household appliances, livestock, automobiles, household effects, and sea food, coffee, and boats, that is, pleasure boats, personal effects in both directions, and household appliances.

Q. What is—are you through?

A. And fresh killed beef.

Q. What is the rate that you charge for that movement?

A. That rate is about one-third—one third of the southbound rate. I might add—

Q. I would like it in dollars and cents.

A. I will give you a comparison to Panama. Our average rate is approximately 14 cents per pound. Northbound it is 10 cents per pound.

Q. Moving from Miami or Tampa, Jacksonville, Florida, rather.

A. St. Petersburg.

Q. Tampa, St. Petersburg, to Panama, you move the [fol. 125] white goods, etc., at 14 cents a pound?

A. The white goods we have a lower rate on.

Q. What is that?

A. The specific rate on refrigerators and certain other commodities with a minimum of 5,000 pounds per shipment, ten cents a pound.

Q. You make a profit on that at ten cents a pound?

A. We make a profit on ten cents a pound when it is balanced with the northbound.

Q. What's that?

A. When it is balanced with northbound.

Q. Apart from northbound, do you make a profit in carrying—to carry these refrigerators, and so on, ten cents, from Tampa, St. Petersburg, to Panama, is that above or below your cost?

A. That is above—that is below cost.

Q. Below cost?

A. Ten cents per pound is below. In other words—

Q. Does the distance—

A. I want to clear that point. The southbound movement returns more than the cost of the operation of the aircraft.

Q. I am not clear now. I was clear before. Now I am not. Will you please repeat that?

[fol. 126] A. Well, I think that I would rather state my answer on the basis that our concept in the development of southbound traffic, it also is inherently tied in with the development of northbound traffic, and in the past few years the rate structure on northbound has improved considerably by virtue of new products being developed for import into the United States.

Q. Putting it another way, Mr. Carmichael, what you lose on your southbound traffic you hope to or you do make up on your northbound?

A. No, we only apply—well, let me put it another way: Our load factor is around 87 to 90 per cent on the round trip, and that is consistently 80 to 90 per cent. Maybe that answers your question. We base our rate structure on the experience load factors and predicted load factors. And the rate southbound, while it may be low, balanced with the known load factor is a profitable operation.

Q. You operate on a frequency of every other day, is that right?

A. That is our present schedule.

Q. On your present schedule do you have an 87 to 90 per cent load factor every other day?

A. Yes.

[fol. 127] Q. Mr. Carmichael, you cite these prices of 14 cents and 10 cents per pound. That is per mile?

A. That per pound.

Q. Per mile?

A. No, per pound delivered to the destination.

Q. What would your rate be per pound if you flew it from Tampa or Jacksonville, say, to Santiago, Valparaiso?

A. We don't provide a poundage rate for Santiago. It would be a combination of our rate as far as our service goes, which is Guayaquil field at Panama, but I can say, offhand, that the rate amounts to about 70 cents per pound delivered to San Diego, combination.

Q. What I was trying to bring out, and I think your answer shows you are in agreement, that the longer the haul the more expensive it is—

A. That is right.

Q. —to the shipper. Are you familiar with the rates of steamship companies?

A. Generally speaking, I am.

Q. Generally speaking?

A. The Central American area more so than South American area.

Q. Are you familiar at all with steamship company rates, [fol. 128] say from, let us say, the Atlantic Coast of the United States down the west coast of South America?

A. I am familiar with the fact that the rates don't change too much for the long distance.

Q. Isn't it the fact the rates for the steamship company are much, much lower than the air cargo rate from the Atlantic coast of United States down the west coast of South America? And only answer that if you know.

A. I think it is, of course, a known fact that the basic steamship rate is much lower than any basic air rate, but that is not how we compete. We compete on the overall transportation from the manufacturer to the destination.

Mr. McKay: Would you bear with me one moment, your Honor?

(A pause)

Q. Just one more question, Mr. Carmichael. Is it not a fact that Panagra is one of the competitors of Sud Americana?

A. Yes, sir, that is a fact.

[fol. 129] GEORGE L. GILES, called as a witness on behalf of the Government, having been first duly sworn, testified as follows:

Direct examination.

By Mr. McConnell:

[fol. 131] Q. You are now the president of Riddle Airlines and have been such since that time?

A. Yes, sir.

[fol. 132] Q. What was the situation, do you recall, in Riddle that you had to deal with particularly?

A. In December of 1957 the principal stockholders of Riddle Airlines tried to determine whether they should close down the operation due to expenditures, loss of money. They determined, however, to put in new management and to make an honest attempt in streamlining the operation to see if it could be re-evaluated and put into a profitable operation. At that time they were losing at the rate of \$285,000 a month. I went into the operation and reviewed it to determine, first, what was the directive of the opera-

tion, in other words, that is the certification placed by the CAB. That spelled out one thing and one thing only, and that was the movement of materials by air. Riddle Airlines certificate does not allow them to carry passengers. It is purely an all cargo airline. So we eliminated some of the activities that Riddle had been engaging in, such as pipe line manufacture, installation of air conditioning sets in automobiles, and the movement of flowers, bouquets clubs, a few things not pertaining to the movement of air cargo.

[fol. 133] We reduced our personnel from a thousand to around 560, representing almost a hundred thousand dollar savings in the payroll.

Since that time we have been able to bring the airline to a point where today we are averaging around \$35,000 loss, cash loss, on the operation.

Q. In connection with the management of the company that had the problems of Riddle, you made very detailed studies with respect to the cost of operating air cargo transport?

A. That is correct. Once we confined ourselves to the basic principle of carrying cargo we had to evaluate the type of equipment that the company owned.

Q. Would you briefly describe the operations of Riddle at the present time?

A. Riddle Airlines is certificated under two particular routes, route number 109, which is from New York to San Juan, San Juan-Miami, Miami-New York; route 120, which is basically from Miami through Toronto into Chicago, Toronto into Cleveland and Detroit. There are intermediate cities within those two routes.

[fol. 134] Q. Would you operate in Puerto Rico from New York; is that correct?

A. Correct.

Q. And from Miami.

A. Correct.

Q. As domestic air carriers how do you rank in size?

A. Classified on air freight, that is, the freight that you have to go out and generate through sales, in 1958 we ranked third.

Q. Who ranks second?

A. Flying Tigers.

Q. Flying Tigers. Mr. Giles, from your point of observation as president of Kiddle at the present time would you say that there is an active competition in international trade between air carriers and ships?

A. Yes, there is.

Q. Will you explain generally some of the factors that enter into this competition and the nature of them?

A. There are certain commodities in which the tariff itself is very compatible. Then, when you add the benefit [fol. 135] of speed to that, you get to a point where you can obtain the contract for movement of material.

There are other categories of materials where the basic rates are not compatible. However, when you analyze them and add to the basic ocean freight the necessity for the export packing, for the domestic haulage to the wharfs, for the documentations at the origin station, and also the same activities at the destination, add to that your speed which is available through the movement by air, we then find that in a great number of cases on general commodities we can be very, very competitive.

Q. Can you give some actual illustrations just drawn from your files—

A. Yes, sir.

Q. —where you actually have competed with ships?

A. Yes. I could cite one that happened recently where our sales personnel became aware of a movement of fire bricks from St. Louis to Venezuela. Our sales personnel approached the purchaser and showed them through speed and through the use of aircraft charter that they would be able to put their thermal station into operation and be [fol. 136] deriving benefit from it prior to the bricks ever arriving in Venezuela had they gone through New Orleans and across to Venezuela by water.

Q. Were the ships soliciting that particular shipment when you did that?

A. This happened to be one case where the Ocean Transportation Company had the contract. We were able to take it away from them.

Q. Take it away from them.

A. Yes, sir.

Q. Do you have any other illustrations that just come to mind?

A. Yes. I can illustrate the case of the movement of Sunbeam Products, basically hair driers, during this last Christmas.

Normally hair driers are shipped north to New York by ocean vessel and across to Chicago by truck. We were able to show the distributor in Chicago that if he shipped by air he would not have to, first, pack for export, secondly he would not have an inventory tied up during a number of days of traffic by ocean vessel and by truck, and thirdly he would have the type of commodity that he wanted for immediate retail sale in Chicago within a matter [fol. 137] of 12 hours. This shipment of 80,000 pounds we were able to handle.

Q. I know you have not searched your file, but is there another illustration?

A. Just another illustration.

Q. Do you have another illustration?

A. Yes. I can even point one out where we moved a circus from Miami across to Puerto Rico, an entire circus which included three elephants. It was possible for the circus operator to have the circus under performance prior to the time of arrival had the animals been sent by surface.

Q. Do you have any other illustration?

A. Yes, I could illustrate, for instance, the textile movement from New York to Puerto Rico where the raw materials are shipped from New York in what we call pre-cut, shipped into Puerto Rico where the hand embroidering is completed, immediately turned around and shipped back to New York and placed on the markets here in New York.

The elapsed time for doing that is many, many days less than it would be for surface, and apparently the industry finds it to their advantage economically to do business that way.

The Court: That must have been some years ago; isn't [fol. 138] that right?

The Witness: No, sir, that is as of today. Each day we have shipments going, every day, five days a week, from New York to Puerto Rico and back.

The Court: Don't they have to pay the same Fair Labor Standard Wages in Puerto Rico?

The Witness: No, they do not. That was one of the attractions that Puerto Rico had to offer through this industrial move of Bootstrap. Over the past five years the labor unions have been bringing considerable force to bear, and the basic wage is being reviewed twice a year. It is now approaching one dollar which is quite equivalent to what it is in the States.

As a result of this it appears that Puerto Rico may not be the heart of the textile embroidering industry, but there is a trend and it is moving toward the Philippines where lower labor is the deciding factor.

Q. What are some of the other commodities that just happen to come to your mind that you ship down to Puerto Rico, back and forth?

A. Goodness, we ship everything. Every day we are shipping bread, we are shipping pies, we ship raw material in the form of aluminum extrusions which are manufactured into jalousied windows in Puerto Rico, then we carry [fol. 139] the jalousied windows back to Miami.

We send down raw materials which are, as I mentioned, embroidery; also send down raw materials for carpet and rug manufacture, electrical, livestock.

Q. All of those—

A. You name it; we have it.

Q. All of those items would go by ship were it not for the air lift; is that not true, sir?

A. That is the type of item that would go by ship, yes.

Q. In connection with your study of the problems of Riddle I suppose you have made very careful analyses of the costs of operations; have you not?

A. Correct.

Q. How much do you figure it costs to operate an airplane?

A. Our present fleet of C-46s and C-54s cost us 25 cents a ton mile.

[fol. 143] Q. To recapitulate, you say at the present time your cost per ton mile operating a C-46, both direct and indirect, is what, 24?

[fol. 144] A. No, our overall company costs, which would take in our indirect, our direct and our amortization and so forth, is running very close to 25 cents.

Q. What would the use of the Argosy reduce that to, do you think?

A. I might be telling a trade secret. I believe realistically we should be able to operate between 18 and 20 cents without difficulty.

Q. How much would it reduce your direct costs?

A. It will reduce it from the 15.6 to 10 cents.

Q. By 5 cents?

A. That is correct.

Q. And the indirect costs, I take it, just from pure operation of the airplane, it would reduce that by 30 per cent?

A. By 30 per cent, yes.

Q. Do you think a reduction in costs that would take place by the use of this new plane would greatly increase your traffic?

A. Yes, sir.

Q. Can you estimate by about what per cent?

A. I believe that we would be able to increase our traffic 300 per cent by the use of this aircraft over our current and existing routes as we operate today.

[fol. 145] Q. Do you think that that would get Riddle back on its feet financially?

A. That's what we are definitely trying to do, yes, sir.

Q. That increased traffic would be drawn from the surface carriers, would it not?

A. Yes, sir.

Mr. McConnell: That is all I have.

Cross examination.

By Mr. McKay:

Q. Mr. Riddle, Mr. McConnell was—

A. May I correct that? Mr. Giles.

Q. Yes, Mr. Giles, I am sorry.

Mr. Giles, Mr. McConnell has been asking you to speculate as to what would get Riddle back on its feet. I would like to question you as to why Riddle has to get back on

its feet. What happened? Isn't it a fact that Riddle's condition has been described to the Civil Aeronautics Board as critical?

A. That is correct.

Q. And that is your belief, too, is it not, Mr. Giles, that its condition is critical?

A. That is correct.

Q. Is this critical condition of Riddle due to a lack of air cargo to carry?

[fol. 146] A. No, sir. It is due to mismanagement.

Q. Mismanagement?

A. Yes, sir.

Q. When were you first associated with Riddle, Mr. Giles?

A. February 17, 1958.

Q. And who was the prior management that you accuse of mismanaging?

A. Mr. John Paul Riddle.

Q. How long had he been associated with Riddle Airlines?

A. From the inception of the airlines.

Q. And when was that, Mr. Giles?

A. 1946.

Q. Did Riddle lose money from 1946 down to the time you took over?

A. Except for one year.

Q. What year was that?

A. That was in 1947.

Q. And is it your testimony that Mr. Riddle mismanaged his airline from the very inception of it down to the time you took over?

A. Yes, sir.

Q. Mr. Riddle's fault alone?

[fol. 147] A. After all, he was the president.

Q. You have been in office now four months?

A. No, sir. I have been in office a year and three months.

Q. Is Riddle today making a profit?

A. No, sir.

Q. What is this loss?

A. Its cash loss is approximately \$35,000 a month.

Q. A month?

A. Yes, sir.

Q. Riddle is a domestic air carrier, is it not?

A. Domestic on one route and international on the other one.

Q. And international only to the extent of San Juan.

A. Correct.

Q. It is a short haul operator.

A. On the domestic, yes, sir.

Q. Do you regard it as a long haul operator from New York to San Juan?

A. Correct.

Q. That is its longest haul, however.

A. That is correct.

[fol. 149] Q. Do you hold yourself out here, Mr. Giles, as an expert on the international air cargo movement on a long haul basis?

A. I do not hold myself out as an expert, no, sir.

Q. Do you know Arthur Vining Davis, Mr. Giles?

A. Yes, sir.

Q. Mr. Davis advanced the Riddle Airlines more than \$2,000,000 during 1958, did he not?

A. No, sir. In 1958 Mr. Davis did not advance Riddle Airlines one dollar.

Q. I may be in error. Would you pardon me a moment?

A. Yes, sir.

Q. Are you familiar with the application, which I believe you signed, Mr. Giles, to the Civil Aeronautics Board dated March 24, 1958?

A. Yes, sir.

Q. That was an application asking the Civil Aeronautics Board to grant a subsidy to Riddle, was it not?

A. Correct.

Q. In view of its critical condition.

A. Correct.

Q. That without this subsidy it was represented Riddle couldn't continue.

[fol. 150] A. Correct.

Q. You don't recall the statement in that application as follows:

"Mr. Davis advanced the company more than \$2,000,000 during the last fiscal year."

A. That is 1957, I believe.

Q. My error. I said it was 1958. You are quite accurate. So that in 1957 Mr. Davis advanced the company \$2,000,000.

A. Yes, sir.

Q. And did he thereafter refuse to advance Riddle any further sums?

A. No, sir. I did not ask him for one dollar.

Q. Do you know whether Mr. Riddle did?

A. Mr. Riddle had no association with Riddle Airlines during that period, so I do not know what he did.

Q. You do not know whether or not Mr. Vining Davis refused; all you know is that you did not ask him.

A. No. I will correct that. I know he did not refuse because he was not asked.

Q. Because what?

A. Because he was not asked.

Q. I read you another statement. Perhaps again I am [fol. 151] technically in error, but let me read this statement to you, Mr. Giles, on page 3 of this application which I believe you signed:

"Mr. Arthur Vining Davis, a principal source of funds in the past, has determined that he will put no additional capital in the company."

Is that correct?

A. That is a statement he made at the time he wanted to change the management, yes, sir.

[fol. 153] By Mr. McKay:

Q. Mr. Giles, do you blame Riddle's critical condition on the management of Mr. Riddle?

A. Correct.

Q. Isn't it a fact that when you were obliged to apply to the Civil Aeronautics Board for an exemption in order to take you out of this critical situation, that three other air cargoes at or about the same time also applied for a similar exemption on the ground that they, too, were in a critical condition? Is that a fact, Mr. Giles?

A. It is a fact, but I do believe that they were taking advantage of Riddle Airlines having gone in, and made

this application. As you might say they were riding in on our coattails.

Q. Have you read their applications, Mr. Giles?

A. Oh, yes.

Q. Do you disagree with anything contained in their applications?

A. Yes.

Q. Do you accuse them of misrepresenting their financial situation to the Civil Aeronautics Board?

A. No, I do not.

Q. And if they say their financial situation is critical, [fol. 154] then you would not disagree?

A. No, I would not disagree.

Q. Do you know whether the Flying Tiger Line has been mismanaged in the past?

A. No, I believe it has been managed very well.

Q. Do you know anything about Slick?

A. Yes, I am aware of their operation.

Q. What about their management? Has that been mismanaged?

A. I believe their failure was through mismanagement, yes, sir.

Q. And what about the other one, Mr. Giles, if I pronounce it correctly, Aaxico Airlines?

A. Aaxico.

Q. Was that mismanagement?

A. No. That is a very healthy little airline.

Q. But they, too, were in a critical situation as far as their application goes and as far as your knowledge goes?

A. I do not believe that they represented their case as being in a critical position. As I recall, they represented their case as the fact that they believed that the all-cargo [fol. 155] carriers should have the right of subsidy in view of the subsidy that had been granted to other carriers.

Q. Isn't it a fact that they said they would be forced out of business unless they get this relief, this subsidy?

A. In Aaxico's case, to my knowledge I am not sure that they made that statement.

Q. I am reading from Aaxico's application to see if it refreshes your recollection, Mr. Giles, at page 5:

"Aaxico is one of four domestic cargo carriers which must inevitably be forced out of business unless some temporary relief is granted by the Board."

Have you any reason to disagree with that statement as far as your knowledge goes?

A. No, in that they say inevitably in the future they would be forced out. I do not believe that represents that they are in financial difficulties at the present time.

Q. But in any event, Mr. Giles, as far as Riddle was concerned, unless it gets this exemption it is a very critical situation, is it not?

[fol. 156] A. Certainly it is critical. As long as you are losing money it is critical.

Q. You made the statement, Mr. Giles, I assume only half seriously, to Mr. McConnell: "You name it; we have it." I assume you meant: you name it, we carry it; is that correct?

A. Well, I believe that is more than just half comical. I believe it would be very difficult for you to name a commodity that we have not carried at some time.

Q. Let's start off with the obvious. You can't carry bulk ore, can you?

A. Bulk ore?

Q. Yes.

A. We have carried bullion.

Q. I am talking about bulk ore.

A. No, in that particular instance to my knowledge we have not.

[fol. 158] Q. Isn't it true that a good part of Riddle's business is with the United States Government, moving military cargo?

A. No, sir.

Q. What portion of Riddle? Does it do business and move military cargo?

A. It does business with the United States military which is about one-third of what its overall business is.

Q. I considered that a good portion. I am sorry. But it is one-third?

A. Approximately one-third.

[fol. 159] Q. Well, do you consider yourself an expert, Mr. Giles, on international air cargo movement on a long-haul basis? And I don't mean by long haul the 600 miles from New York to San Juan. I am talking New York to the West Coast of South America. You said you weren't familiar with the steamship rates.

A. Correct.

Q. Are you familiar with the rates of the airline over that route, New York to the West Coast?

A. Not to the West Coast, no. That is the West Coast of South America.

Q. Mr. Giles, you said that Riddle had a tentative order for new planes?

A. Correct.

Q. And if you made the commitment you expected a reduction in costs and to increase the volume?

[fol. 160] A. Correct.

Q. Why is the order tentative, Mr. Giles?

A. That happens to be the way that almost every airline places an order. You never go in and buy a new airplane outright. You always place a tentative order whereby it gives you authority to go in and make further evaluation of that airplane.

Q. I see.

A. For one thing, for instance, a cockpit evaluation, the cargo-handling facility evaluation, radar evaluation. Those are all things that you go in and due to your particular airline you have particular characteristics that you want to have included in that airplane.

Q. So it is tentative up to the point that you satisfy yourself that the plane that you have tentatively ordered satisfies your needs and requirements; is that correct?

A. That's correct.

Q. And your order is still tentative, isn't it?

A. That's correct.

Q. I think you said, Mr. Giles—and you correct me if I am wrong—that with this new airplane which is on tentative order and which you are still debating whether it satisfies your needs or not that you believe that you will increase your volume over 300 per cent?

A. That is correct.

Q. What is the basis of that belief?

A. On the basis of the capacity of the airplane, 27,000 pounds, against 11,000 pounds for a C-46.

Q. Have you estimated your costs, cost of the plane and your other costs?

A. Comparing them to what?

Q. What I wanted to know is this: You say you will increase your volume by 300 per cent?

A. Correct.

Q. By that you do not mean that you are going to increase your air cargo movement by 300 per cent, do you?

A. Yes, sir.

Q. In other words, you would expect to run at 100 per cent load factor?

A. No, you never run at 100 per cent load factor.

Q. Then I am lost. Would you explain?

A. I will be glad to.

[fol. 162] Q. Thank you.

A. You run approximately 80 per cent load factor, and if you take 80 per cent of 27,000 pounds, you will have to take 80 per cent of 11,000 pounds, and with 27,000—let's use 27,000 as a round figure—so it gives you almost three—it gives you two times the capacity plus the speed of the airplane, which is 300 miles an hour, as against 186 or 185 miles an hour for a C-46, you can replace three C-46s with one Argosy.

Now I will go one step further. Today we are carrying around 56 million pounds of cargo a year.

Q. Fifty-six?

A. Million; that's correct. We could continue to operate on exactly the same pattern but with equipment, and I am confident, and this is only my own personal opinion, but I am confident that we could increase it close to three times.

Q. Increase the 56 million pounds?

A. That's correct.

Q. On what do you base that confidence?

A. On the operation as I see it today, evaluating the application of new equipment to it as to what can be done.

[fol. 163] Q. Have you made any study on that? Have you any figures on that, just what cost factors you took into consideration?

A. Certainly. I have repeated them a short time ago.

Q. I am asking you if you have any in writing. This is distinct from the other personal notes. Has Riddle Airlines under your management made any study?

A. Oh, yes. We made a route analysis. We made our cost analysis as to how to pay off on the aircraft.

Q. Have you those with you, Mr. Giles?

A. I do not have them with me, no, sir.

Q. Would you be willing to produce them?

A. I can give them to you. I will be glad to.

.

[fol. 164] By Mr. McKay:

Q. Mr. Giles, do you have the capital with which to buy these planes of which you speak?

A. Not at the present time, no, sir.

Q. Where do you expect to get it, from the subsidy that you are hopeful of?

A. No, sir.

Q. Where is that from?

A. The purchase of new aircraft is a relatively easy thing to do nowadays.

Q. Borrow money?

A. That's correct. You can borrow capital against—finances against your capital equipment, or there are companies who are financing aircraft and leasing them back lease purchased. I would like to bring up, however—you brought up the subject—

Q. You just answer my questions, if you will, Mr. Giles. I am sure Mr. McConnell will bring out anything you care to say.

A. All right.

[fol. 165] Q. You testified on direct examination, Mr. Giles, as to your direct and indirect costs in connection with these new planes. I was wondering if you had figured in depreciation at all.

A. Correct.

Q. You have?

A. We have, yes, sir.

Mr. McKay: That is all.

The Court: Any redirect?

Redirect examination.

By Mr. McConnell:

Q. I know it would be going back, but what idea was it that came into your mind?

A. Thank you.

Mr. McKay: I won't object to the question.

The Court: It might be about going to a show. Can't we confine it to some particular part of this examination.

A. It is a very interesting feature about financing.

The Court: The witness said it relates to a very interesting feature of financing.

Q. What financing does it relate to?

Mr. McKay: I object to the form of the question.

[fol. 166] The Court: I will allow it. Maybe we will get finished.

What financing, Mr. Giles?

The Witness: In this particular instance the English company, through the Export Credits Bank Association, is requiring 10 per cent down on the aircraft. On four aircraft which were delivered in Miami at six and a half million dollars, which includes your 12 per cent import tariff and 15 per cent operational spares, is roughly \$650,000. There will be no payment whatsoever during the first year of operation. Then payments will be made at the quarterly rate of roughly 5 per cent interest. If you turn around and run some quick mathematics you will find that that means that you can procure new aircraft delivered in the United States into operation at a monthly figure which is less than what you can lease DC-6 aircraft for today.

[fol. 168]

New York, May 5, 1959.
10.30 a.m.

Mr. McConnell: May we recall Mr. Giles for just one brief question?

The Court: All right.

GEORGE L. GILES, was recalled and, having been previously duly sworn, testified as follows:

Direct examination.

By Mr. McConnell:

Q. Mr. Giles, in your operations at Riddle, do you participate at the present time in any traffic coming up from the West Coast of South America?

A. Yes, sir.

Q. Which would be competitive with Grace and the other surface carriers operating on the West Coast of South America?

A. Yes, sir.

[fol. 169] Q. Could you describe that traffic?

A. There is a movement of Bermuda onions which are grown in Chile. A group of planters have selected air transportation to place Bermuda onions in the New York market.

Q. Is that a substantial traffic?

A. Yes. That traffic this past year has amounted to probably 500 tons.

Q. Five hundred tons?

A. Yes.

Q. That traffic formerly moved by ship; is that correct?

A. Yes, sir.

Mr. McConnell: That is all that I have.

Mr. McKay: No cross.

The Court: All right.

(Witness excused.)

STANLEY H. BREWER, called as a witness on behalf of the Government, being first duly sworn, testified as follows:

Direct examination.

By Mr. McConnell:

[fol. 173] Q. Will you describe the methods used by you in preparing these studies, Professor Brewer.

A: Well, the analysis is fairly technical.

We spent a very large number of man hours with a fairly big staff of technicians.

We first looked at the traffic moved by every form of transportation at the present moment.

We looked at the rate of charge by these various forms of transportation, including truck carriers, rail carriers, freight forwarders and shipping companies.

[fol. 174] Then we analyzed this traffic commodity by commodity to try to determine what would be considered to be air potential.

We looked at growth in the economy out into 1965 in these particular reports, forecasted gross national product, population, foreign trade, various other things that are normally used in forecasting anything in our economy and deduced from this what we considered to be the potential air cargo.

Once we had arrived at what we considered to be potential, we then looked at what we thought could be observed within the immediate future. We looked at the cost of the operation of airplanes; we looked at possible technological break throughs in airplanes; we looked at management interest in air cargo; and from this arrived at what we thought was achievable within the next four or five years.

We are somewhat pessimistic because we saw very little in the way of management interest on the part of the major airlines in air cargo. They were so very concerned with passenger operations, with mail and with other things that they hadn't really spent too much time with this. They didn't have airplanes that could economically carry cargo. [fol. 175] So that, as we forecast into 1965, we didn't see too much growth in this particular picture.

We saw that the rate of growth in the domestic market would probably continue at about the same rate for the next few years.

We saw a little bit of a break through in the international market simply because we saw that the distances were somewhat greater and that this would multiply our common denominator which we used, which was ton miles of movement.

Since that time we have become a little more optimistic about this because we have become acquainted with the aircraft that is available to operators at the moment.

[fol. 179] Q. In your studies did you come to the conclusion that at the present time there is an area of competition [fol. 180] between air carriers and ships?

A. Well, I would say that there is probably an area of competition, but there are substantial cost differentials at the moment, so this competition now is probably relatively slight.

Q. Will you explain some of the factors that enter into that?

A. Would you be more specific in your question, sir?

Q. When a shipper chooses between modes of transportation, the ship and the air carrier, what are the considerations that go into his choice of the air or the ship?

A. Well, certainly speed is the most important factor in choosing air over ship because the cost of moving by air is considerably greater.

There are other considerations. Certainly, when you move by ship, you have to put materials into what is called an export pack. This pack is much more expensive. It has to stand the rough handling that goes into movement by ship, and it adds considerably to the weight of the product.

Certainly a shipper interested in things that he needs on an emergency basis will weigh the increased cost of [fol. 181] air over ship from what it is costing him to keep a machine tied down for a period of time, waiting for spare parts or something like that.

Certainly we know that insurance costs by air are somewhat lower than they are by ship. We know that in a steamship movement there are a great number of handlings of the freight in terms of moving it from its origin point maybe to the transit sheds, in terms of moving it from the place of location of the transit shed to the apron, in terms of putting it into the hold of the vessel, in terms of breaking it back out of the hold of the vessel, back to the apron, back to the transit shed, maybe to a warehouse and from a warehouse on in.

We think that the air carrier can eliminate at least some of these handlings.

Q. What is your conclusion from your studies of the future of air cargo?

A. Could I ask you what you mean by the future, sir?

Q. Ten years, I think your study encompassed.

A. These particular studies that you are presenting in evidence only go up to 1965 which is now only six years [fol. 182] away. We have forecast the future out to 1975 in more recent studies, and that is why I asked the question.

We see in this immediate future period a period of some turmoil, a period of phasing out of a piston-engineered plane which is much less economical in a cargo operation, a phasing in of what we call a turbine-power airplane.

We see that here is a period of transition; here is a period when the vehicle that the operator will use in the future will become much more economical in freight movement.

We see a period of time in the not too distant future where maybe the airplane carrying freight will be even more economical as a freight-carrying vehicle than it is now as a passenger-carrying vehicle.

We have seen this, of course, happen in every other form of transportation. We talk about the automobile. It was first used for passengers, and then specialized vehicles for freight hauling. We saw it in railroad transportation. To some extent we saw it in ship transportation. We see that the potential in freight movement is so many times greater [fol. 183] than it is in passenger movement that the airplane will come into its own as a routine mover of freight.

We see a major breakthrough in this industry coming some time between about 1961 and maybe 1964.

Q. Will you explain concretely what you refer to as a major breakthrough?

A. Well, a period of time when the operators will undoubtedly start cutting rates very drastically, and as they cut rates, why, of course we know that there is very substantial elasticity of demand for freight movement, this is going to encourage a lot of people to start moving by air.

We think that a lot of firms are going to start taking a very careful look at what we call distribution cost analy-

sis, where they consider all of the factors, the pipeline costs, the warehousing costs, the insurance costs, their capital costs and so forth, and that as they do this, and this is going about in the country at the present time—practically every major producer is beginning to look at this concept—as the rates come down, why, of course, here is when the [fol. 184] traffic starts to snowball as far as the air carriers.

So that by comparison, why, we are talking about a forecasted total movement in international trade, if you want to separate these things, of something over two billion ton-miles by 1965; by 1975, why, we are talking about perhaps 20 billion ton-miles.

Q. About how big an increase will that be percentage-wise?

A. Well, what is it? A thousand per cent? Is that what it adds up to. I don't have my slide rule.

Q. A thousand per cent.

A. Well, if you want to put it—if you are talking about two billion and 20 billion, it is a very substantial increase.

Q. In your studies have you familiarized yourself with the new planes that are being developed for the purpose of expanding air cargo?

A. Well, I am on the consulting staff of the preliminary design department of the Boeing Airplane Company, and this gives me an opportunity to look over the shoulders of those people who are thinking ahead 10 years in terms of the products that they are going to produce.

[fol. 185] Q. Is that confidential?

A. Not for the immediate future, not the things that they are talking about being able to deliver within the next year or two years. Things that they are thinking about, talking about that are out ahead six or seven years are still very much confidential.

Q. Could you describe the plane that they intend to deliver in the next two years?

A. Well, they are talking about a vehicle that will carry 50 tons of cargo—

Mr. McKay: Your Honor, may we have the name of the manufacturer who has this plane?

The Witness: The Boeing Airplane Company for one.

A. We have spent time in the last few weeks with both the Boeing people and the Douglas people on this particular thing, and we did a major analysis of airplanes that the military is looking at to fulfill their lift requirements as the people are well aware, that spend time with this, the military has what they call a general operational requirement for 78 large jet airplanes out, and a source selection board is in session on this at the moment and will come [fol. 186] to a decision within the next 30 days, and the airplanes these people are looking at have been designed and delivery dates committed by Boeing, by Douglas, by Convair and perhaps other manufacturers; I don't know. I've had access to that information at least.

So that we know that at least these three manufacturers are talking about delivering any one of these planes to either the military or to a commercial operator within a period of two years' time.

Q. How much do you estimate that these new planes that will be delivered will reduce the cost of air cargo?

A. Well, when you talk about cost, this is a very technical thing, and we just about have to define terms.

Q. Please do that, sir.

A. Well, we normally compare costs on the basis of what is called the ATA formula. This is a formula that was devised by the airline operators and is published by their association, the Air Transport Association of America.

This formula perhaps needs some revision because it was [fol. 187] originally designed to cost out the piston engine airplane, but it can be used as a rough comparison of costs, and it enables us to reduce cost to a common term called ton-mile cost, per ton mile cost.

So that when we talk about present piston-engine airplanes, why, we are talking about costs of around eight to nine cents a ton-mile for the most efficient piston engine airplanes at the present time, and, if we go on up to the cost of some of the airplanes that are being used as freight haulers at the moment, why, we are talking about costs of perhaps 15 cents a ton-mile.

When we start talking about the long-range, high-capacity jet airplanes, by comparison these things enable the operators to move cargo at a direct operating cost of around 4 cents a ton-mile.

[fol. 188] Q. It will reduce the cost from the lowest cost, 9 cents, is that correct?

A. The lowest cost airplane now is around 9 cents a ton mile, and these things will get it around about 4 cents. So you can see, if you add 4 cents for indirect, and maybe another couple of cents for profit, why, this enables the operator to move freight at a cost of, maybe, 10 cents a ton mile.

Q. In your studies have you paid any particular attention or given any particular attention to the South American market?

A. No, sir, we haven't. In the international study we did an analysis of all of the world's markets. In doing so we looked at origin, destination points in 14 major customs districts of the United States. Then we broke the world down into 17 major world areas. One of these world areas was the west coast of South America, and certainly some of these major customs districts, customs districts like Philadelphia and New York, are here on the east coast, but we didn't, at least I didn't spend any great amount of time dwelling on the South American market.

Q. It was part of a study, however?

A. It was part of a study, yes, sir.

[fol. 189] Q. Would the airplanes which you have referred to, that are going to be delivered in the near future, be suitable for the South American-North American trade?

A. I have no idea. This is a very technical problem that is concerned with airport adequacy, it is concerned with volume of lift, concerned with other things. My recollection is that the South American operators have purchased some of the large, long range jet airplanes for passenger operations, and certainly, if they can use them in passenger operations, they can use them in freight operations.

Q. As air cargo grows in importance, do you think that the area of competition between it and ships will correspondingly increase?

A. I don't think there's any doubt about that. If the operators—I have to deal with averages. We are talking about average rates in international movement at the present time of 30 to 32 cents a ton mile. If these people are able to even cut those costs in half, say to 15 cents a ton

mile, they are certainly going to become much more competitive with steamships, and if they get down to 10 cents—we forecast maybe 8 or 10 cents a ton mile, maybe, by [fol. 190] 1975—we think that by that time the manufacturers will have airplanes that can move cargo at a direct operating cost of something around 2 or 2½ cents a ton mile—so you can see here is an opportunity, if these people get into a potential pricing structure, as I think they may do, to move—if we take the average rate of 8 cents a ton mile, here is an opportunity for them to talk about some rates as low as 3 or 4 cents a ton mile and then, of course, some higher. So I think you will see a period of time in the next 10 or 15 years where you will see a substantial amount of competition between the ship and the airplane, especially for the high value item, and I think we will see, probably, quite a new and different concept in distribution in the area of foreign trade.

Mr. McConnell: Thank you, sir.

Cross examination.

By Mr. McKay:

Q. Professor Brewer, is it not a fact that there have been predictions of mountains of cargo moving by air which have been made by individual government agencies, [fol. 191] by aircraft manufacturers and others, for the past decade and a half?

A. Yes, sir, it is.

Q. Isn't it true that somehow or other the movement hasn't come up to those expectations?

A. Only because they haven't had an economical aircraft.

Q. They haven't come up?

A. They haven't had an economical aircraft. They haven't come up.

Q. Isn't it a fact, Professor, that the future of air cargo lies in the economies of the aircraft?

A. Yes, sir.

Q. Those that have been put into service in the past two years and those that may be produced in the future?

A. Would you clarify the question? I am not sure I understand what you mean by the last two years.

Q. I am asking, Professor, if you agree with the sentence in the prologue of your report which reads as follows:

"We believe that the future of air cargo lies in the economies of the aircraft that have been put into service in the past two years and those that will be produced in [fol. 192] the future."

A. Yes, sir.

Q. It is true, is it not, Professor, that vast quantities of material are moved in international trade by ship?

A. Yes, sir.

Q. And most of this will continue to move by vessel for many years to come?

A. Yes, sir.

Q. That the cost of the airplane cannot in the foreseeable future compete on a straight cost basis? Yes or no, Professor, if you will, if you can answer.

A. It needs qualification very badly.

Q. I was reading from your report, Professor, page 2. I don't believe there was any qualification in your report.

A. Yes, but you are lifting something out of context.

Q. Can you tell me what I am lifting out of context?

A. When we talk about a future in air cargo we are talking about something less than 1 per cent of the total amount. When we talk about something—

Q. Pardon me. Less than 1 per cent—
[fol. 193] A. Of the total movement.

Q. —of the total amount, sea and air?

A. In terms of total ton miles, but this 1 per cent, you see, is the high value packaged goods. This still leaves petroleum and all of the low value things that move in tremendous quantities by ship.

Q. Isn't it a fact that the vast majority of export freight, tons and ton miles, were of commodities that couldn't possibly be carried by airplane?

A. The vast majority, yes, sir.

Q. As far as you can see and look into the future, they never will?

A. Absolutely right.

Q. Isn't it also a fact that only a relatively few of the many thousands of commodities that are now moved in world commerce can be considered to be candidates in the foreseeable future?

A. Yes, sir, that is right.

Q. Is it true that as of exports, the potential of the aircraft and bringing to United States imports was a very small percentage of the total?

A. Oh, yes, that is absolutely right.

Q. At page 58 of your report, Professor, there is a chart printed which summarizes the total ton miles of imports [fol. 194] to the 14 customs districts of the United States from specified areas, and you show for the various areas that go to make up Latin America figures there detailed, and I think you have a total of 151 billions. Would you care to have the report in front of you? Perhaps it might make it a little easier for you.

A. It could.

At page 58, you say?

Q. Page 58. I was pointing out, if I am correct, that you have a total figure of 151 billions as representing the total movement from Latin America to the 14 customs districts.

A. When you talk about Latin America are you adding up the northern South America, southern South America, west, east South America? You have added it up. It isn't added in the table.

Q. It is approximately in excess of 151 billions?

A. Yes, sir.

Q. At page 80 of your report, Professor, you listed a total ton miles of traffic moving to those same customs districts from Latin America, which is valued in excess of 70 cents per pound, is that correct?

A. This is from Latin America to the United States?

[fol. 195] Q. Yes.

A. Right.

Q. And this gives—you arrive at a total import traffic value in excess of 70 cents per pound—of some 336 million ton miles, is that correct?

A. Assuming that this adds crossways. This is east

coast, south coast, west coast, southern North America and northern South America.

Q. Isn't it true, Professor, that according to your own survey the potential air traffic in the import trade between the United States and Latin America is only approximately one-fifth of 1 per cent of the total traffic?

A. That is at the present time, yes, sir.

Q. Is that the present or is that the potential, Professor?

A. We did this analysis of commodities that moved in 1955. So when you forecast out, why, this is something different, and this is what we are thinking about in terms of present rate.

Q. Professor Brewer, have you made any study of the future of the surface cargo, steamships, on a long haul basis?

A. Well, we have forecast this growth, roughly. We—

[fol. 196] Q. Have you made any study of it, Professor? I am talking about you personally, Professor. Have you participated in or have you made a study, as you did of international air cargo? Have you done that with the international surface cargo?

A. Well, may I clarify this just a little bit?

Q. Surely.

A. I don't like to be in the position of not answering your question directly, but when we look at these things here, we are looking at steamship movements. You see—

Q. Present or future?

A. We are looking at the present, and then the only basis of forecast is by correlating this thing to the growth in the economy, and if you will notice in here, we did this kind of correlation study and we found that there was almost perfect correlation between the growth of gross national product, for example, and growth in foreign trade. So, in forecasting out to 1975, for example, we know that at present there is something like a trillion three hundred million ton mile of cargo moved, by that time we increase this by 85 to 90 per cent.

[fol. 197] Q. My question, really, is simple, Professor. At least I intended that it should be. It is this: You have forecast future for air cargo.

A. Yes.

Q. You based that on bigger and better airplanes, more economic—

A. Yes.

Q. —in freight, at least.

A. Yes.

Q. Have you given any consideration to more economic ships in the future?

A. We have given some consideration.

Q. Will you point in your report to where that consideration was given?

A. No, I cannot point to it in this particular report. We have done that in another report we are working on at the moment.

Q. It is not taken into consideration in this report?

A. No, sir, we haven't.

Q. Is it true, Professor, that accurate data as to historical trends in the United States air cargo movement is deceptive and difficult to interpret?

A. It is very difficult to interpret.

[fol. 198] Q. Is it not also true, Professor, that steamship rates on quantity movements are far below attainable cost for moving freight by air in the foreseeable future?

A. Yes, way below.

Q. Is it not also the fact, Professor, that intense competition between air cargo carriers will develop as more of these planes become available?

A. It will depend on what areas of the world you are talking about.

Q. It will develop in some areas.

A. Oh, my, yes. We see intense competition developing right now.

Q. Isn't it true that there are many factors that will hold back rapid development of air cargo movements in addition to the right kind of airplane?

A. We see this is one of the major limiting factors in the potential growth, development of terminals, airports.

Q. So there are other factors in addition to getting the right kind of airplane?

A. Oh, yes, my, yes.

Q. I believe on direct examination, Professor, you stated, and if I am wrong, you correct me, that the international

[fol. 199] forecast presented a rosier future for air cargo than the domestic forecast, and I would like you to be a little more specific, if you can.

A. I would like to explain that because it isn't understood. When we look at movement, we see one of the plain advantages of the speed of the airplane in terms of distance. The greater the distance the greater the advantage, obviously. So that when we look at a forecast and we reduce these things to a ton mile basis, to get it down to a common denominator, why, we are looking at these distance factors, and where we talk about domestic movement, and maybe we can talk about an average length of haul of, perhaps, a thousand miles, we look at an average length of haul in the international market of 2,000, 2,500, 3,000. For the purpose of explanation, let us look at 2,000 miles so that if we move one ton of cargo 1,000 miles, why, you have 1,000 ton miles. If you move that same ton of cargo 2,000 miles, you have 2,000 ton miles. So that we say, in terms of ton mile growth, we see a more rapid acceleration of that growth simply because the distance factor is somewhat greater.

Q. Don't you run into cost factors on the short as distinguished from the long haul?

[fol. 200] A. Well, yes, and once again, in the—historically, you see, the airplane has been a relatively short haul carrier. So your extremely short haul costs are considerably than they are in the longer haul in the domestic market. In the international market distance has been especially a limiting factor because the carriers of the past or airplanes in the past had not been able to fly sufficient range to get over the water. They had to either stop at an island some place to refuel or they had to leave off payload in order to carry enough gasoline to get over there. These airplanes coming out in the future are long range so they can fly non-stop these distances with full payload.

Q. Perhaps I didn't make my question clear. What I was talking about is the cost to the shipper, as distinguished from the short to the long haul. It is very expensive, for instance, to ship a commodity that could move, forgetting about emergency shipments now, from New York to Valparaiso by steamship than it would be by air? It would be

uneconomical to do so, would it not, if there was no emergency involved?

A. I think we have to define terms. It isn't a question that I could answer yes or no.

[fol. 201] Q. Are you familiar with rates charged by air carriers for freight moved from, say, the U.S. Atlantic ports down the west coast of South America as contrasted with steamship rates?

A. No, sir. No, this isn't anything that we have looked at.

Q. And I think in answer to one of Mr. McConnell's questions on direct examination you said you made no particular study or concentration on the west coast of South America?

A. That is correct.

Q. I think you testified, Professor, that a turbine aircraft may be more economical in carrying cargo than in carrying passengers in about 1961 or 1965, is that correct?

A. No, sir. I said, I suggested that this would be out, maybe, in 1964, 1965, something like that. I don't think it is going to happen that fast, although it might, I mean.

Q. You just don't know? It could possibly happen?

A. In 1961, 1962?

Q. Yes.

A. Oh, yes, if people got the orders in.

[fol. 202] Q. What aircraft particularly were you referring to, Professor? Did you have anything particular in mind, any particular aircraft?

A. The things that we have analyzed in detail are such things as the Boeing—if you want the commercial version, it is called the Boeing 735, another that is being operated by the military at the moment.

Q. I was talking of commercial.

A. Yes. That is the designation of it, 735. Douglas has a similar airplane. Convair has a similar airplane. I am told, but not my knowledge, that Convair has a Convair C-34 that is being offered to the operators at the moment. There are a number of different airplanes.

Q. They are on the drawing boards at present?

A. I would say that they are more than on the drawing boards.

Q. Just what status do they have at the present time, best you can tell us?

A. Airplanes are born in families, as a general proposition, and the airplane that Boeing, for example, is flying, 707, which we must forget, just because it has in operation—

Q. That is passenger.

[fol. 203] A. Well, there are several versions of this thing. The one that is in operation at the moment is called 707-20, and it is a relatively small airplane. Pan American, for example, will take delivery of what they call the larger intercontinental version, called 320, within the next few months, and it is this larger intercontinental version that Boeing Company is talking about putting larger doors in, increasing the floor strength, and this airplane will lift 50 tons of cargo at a time.

[fol. 204] Q. And you say Boeing is talking about doing that?

A. They have offered them to the operators.

Q. Who have they offered them to, do you know, Professor?

A. Well, I am not qualified to testify to this because it would be purely hearsay. I have talked to their salesmen. They tell me that they have talked to Pan American, they have talked to Flying Tigers, they have talked to most of the operators that they think are vitally interested in cargo.

Q. This is not the plane, however, that you are talking about that can operate at costs of 4 cents a ton-mile?

A. Yes, sir, it is.

Q. It is.

A. Yes, sir.

Q. With regard to your testimony on this 4 cents, that on long-range turbine aircraft there will be costs of 4 cents a ton-mile, is this the all-out costs conformable to a shipping rate?

A. No, this is direct operating costs that we are talking about.

Q. Just direct operating costs?

[fol. 205] A. Just direct operating costs.

Q. It doesn't include loading or unloading or any of the other costs?

A. No, these are direct costs.

Q. Professor, you listed certain factors for Mr. McConell that might induce or incline a shipper to choose air transportation. Can you tell us what factors there are that might lead a shipper to choose surface or sea transportation?

A. Yes. Costs primarily.

Q. That is a big factor, is it not?

A. That is a big factor.

Q. In view of the big differential?

A. If you are going to move freight in large quantities, this is the big thing. If you are moving package freight, this is something else.

Q. If you are moving package freight, Professor, if you are in no hurry, there is no emergency, isn't it more economical to move it by sea?

A. By all means. There is just no question about it.

Q. Can you name any other factors, Professor, that might incline a shipper towards sea rather than air?

[fol. 206] A. I am sure there are many.

Q. They just don't come to mind.

A. I don't know what they are offhand. I think that maybe some people might like to keep their inventory tied up for weeks at a time, for example.

Q. Professor, I understand the purpose of your report to be setting forth what could be the potential growth of air cargo transportation over the next six or seven years; is that correct?

A. I would have to answer that no, if I were asked to answer yes or no.

Q. What is the purpose of your report?

A. To forecast what is obtainable.

Q. What is obtainable?

A. What we think is going to happen in this field.

Q. It is a prediction?

A. It is a forecast.

Q. This was made at the request of the Boeing Airplane Company?

A. We had a contract from the Boeing Airplane Company to do this study. We contract with many, many firms to do studies of this nature.

[fol. 207] Q. Is it a fair summary of your report, Professor, that you first state the volume of U. S. imports and exports in ton-miles as being roughly one trillion ton-miles?

A. Something like this, yes.

Q. Per year?

A. Per year.

Q. And then you assume that commodities having a value of 70 cents per pound can stand to pay for air movement; is that correct?

A. That is not quite correct, no.

Q. Could you correct me on that?

A. Yes, sure. I would be delighted to.

When we looked at values of commodities, we were looking at gross weights, and we were dividing these gross weights into the values that were given to us by the Department of Census.

Well, in so doing we had to say to ourselves: Well, inasmuch as these are gross weights, they include weight of packaging. If you were to move these same items by air you would probably have a much lighter pack, and we looked at studies that the Department of Commerce and other people had made and found out that these gross [fol. 208] weights inflated shipping weights by as much as 30 per cent.

We also looked at the rising spiral of inflation somewhat realistically and said that prices are going up, that by 1965 we will have some inflation. If we strip this packaging off of these things, this 70-cent value that we are talking about becomes a value of approximately a dollar a pound.

This isn't really scientific because you are talking about thousands of items. If you analyze it one by one you might come up with an average of something more than that or something a little less, but it is about a dollar a pound.

Q. Just how did you arrive at this figure, Professor, the 70 cents or the dollar per pound? What mechanics did you go through? Was it by a sampling process?

A. The Department of Commerce—I am not sure that we documented this. The Department of Commerce had a major study on the extent to which packaging inflated weights in the ocean shipping industry. This was a factor.

And, if we can use a figure of 20 per cent, which is a median type figure, why, we can say that 100 pounds of material, [fol. 209] shipping weight, becomes 120 pounds.

So that, if we divide this into the total value of the thing, you see, the shipping weight tends to deflate the value. So that we had to throw this factor in there.

Then we had to look at average increases of price over a period of the last six or seven years, and we indicated that there would be some increases in price in the next few years. And this is the way we arrived at it.

Q. At the 70 cents?

A. Well, we determined that this 70 cents was actually about a dollar a pound we are talking about.

Q. That is what I want to determine, Professor, if you can tell us. Just precisely how did you arrive at the 70 cents or the dollar? You do mention the 70 cents per pound as possible potential candidates for air movement, anything 70 cents or over.

A. Can we talk about a dollar?

Q. May I ask, Professor, one question? Why don't we talk about 70 cents? I just want to get clear in my own mind. You do in your report speak of the 70-cents-per-[fol. 210] pound item as being a possible potential candidate for air movement. I don't understand the objection to the 70 cents. I am willing to go to the dollar, but I would like to understand why.

A. Well, perhaps I should explain it again. When you look at shipping weights in air and sea commerce, you will admit as a shipping man you have to put a lot heavier pack for ship movement than you do in air movement.

Q. You may or may not, Professor.

A. So that the added weight tends to—and of necessity we have to deal in broad averages when you are looking at the total world movement. This tends to deflate the actual value of the material because of the added weight.

So we are talking about something that has to be on an average more than 70 cents, and the present time it is probably—we thought in terms of this being 90 cents at the present time and a dollar a pound the actual value of the material in 1965. This is what the shipper looks at, and he says—and once again we have to—you can criticize me

for being too general when you want to get down to specific [fol. 211] cases, but I have done work for a very substantial number of shippers as a freight traffic consultant, and we know that their average distribution cost, their average freight cost runs from, oh, values of one per cent of the value of the product up to 50 per cent of the value of the product.

Q. Believe me, Professor, I don't mean to be critical with you at all. I am trying to understand this. This 70-cent figure you use, or take your dollar figure, that is a more-or-less figure; it could be off. It is a rough approximation, the best one you could make in this difficult area?

A. That's right.

Q. If it was off, say, 5 per cent one way or the other, what effect would that have on the forecast you made, on the possible potential candidate items for air movement? It would have a very great effect, would it not? If you moved that 70 cents one way or another by, say, 5 cents, that would affect your prediction, would it not?

A. I don't think so, not at this moment of time. It might have at that time. But we have decided that there is so much potential in self-generated traffic in air that wasn't [fol. 212] even considered in here that these things may be way low.

Q. Quite apart from the things that you did not consider, Professor, it would make a difference. I am asking you to consider the things that you considered at that time. Following the formula that you—

A. You see, the only things we looked at here were the things that were moving by ship that were possibly potential, and—

Q. I want you to keep looking at that, Professor.

A. We didn't look at anything that was moving by air or anything that the aircraft was generating.

Q. I want you to keep looking at what you were looking at, Professor.

A. Fine.

Q. If your 70 cents were 65 or 75, that would have a major effect on the prediction that you made.

A. I am not sure that it would make a major difference because we—

Q. How much of an effect would it have? Could you tell us?

A. We saw that the potential was so tremendously vast, and the things we were predicting for the future were [fol. 213] so very small as compared to that, that if we are talking about a potential of 60 billion ton-miles or some such matter and we are only predicting an achievable of two billion, you have to throw these factors into it.

Q. We can agree it would affect your prediction?

A. If we were off 10 per cent and we say that we thought that the potential was 60 billion, and we are off 10 per cent, this means that the potential is only 54 billion. Out of that we thought that the achievable that is in this area was in the ability of the air carrier to absorb or develop additional traffic. It had nothing to do with the potential particularly.

Q. Is it a fact, Professor, that your ultimate conclusion is that between one and 2 per cent of the total traffic might be called an air potential, given the right circumstances?

A. That is what we said, yes.

Q. And by the right circumstances—I think we have been over that—that is, given the right plane, the right airports, right terminal facilities and all the other factors that [fol. 214] enter into air cargo movement in the future.

A. If they could possibly achieve this 2 per cent, why, we would be talking about a total movement in excess of 100 billion ton-miles by 1970 and we are predicting something around 30 or 40 billion ton-miles.

Q. But still only 2 per cent at the rosiest?

A. The rosiest is 2 per cent. We are thinking in terms of achievement in terms of 7/10 of one per cent.

Q. Professor Brewer, is it your belief that in the foreseeable future this one per cent will come about?

A. No, sir. I have forecast to 1975, and at that time I am looking at 7/10 of one per cent.

Q. Professor, do you know whether or not your report has been used by Boeing in any of its sales promotions? Has it been distributed to customers, potential or otherwise?

A. Well, my recollection is that they have had requests for over a thousand copies of this report. It is the kind

of report that would be of interest to customers or potential customers.

Mr. McKay: That is all.

[fol. 215] Redirect examination.

By Mr. McConnell:

[fol. 225] By the Court:

Q. My recollection is that you said that your forecast based upon your studies is that, looking into 1975, there will be about 8 billion dollars revenue by the airplane companies and of that 50 per cent you estimate would be from cargo.

A. Yes, sir.

Q. Do you have any figures or have you been able to determine what percentage of the total tonnage that is now, say, imported into the country is represented by such bulk commodities as oil and ore and lumber perhaps?

A. We find that of the total tonnage moved in and out something less than 10 per cent is what we call a dry freight package freight, and the rest of it is bulk, when [fol. 226] we talk about ton-miles.

Q. So it roughly is 90 per cent of this bulk merchandise?

A. Yes, sir, on a ton-mile basis.

The Court: Thank you.

Mr. McKay.

Recross examination.

By Mr. McKay:

Q. Professor, am I correct that the basic assumption of your report is that the higher valued merchandise is more likely to go by air? Is that your basic assumption?

A. That is one of the basic assumptions, yes, sir.

Q. What basis have you for that assumption, Professor? Do you anywhere demonstrate that assumption in your report?

A. In the international report?

Q. Yes, sir. I am trying to find out how you substantiate that.

A. I am trying to think back to this particular thing.

Q. And do you do so in your report?

A. My only answer to it has to of necessity be—
[fol. 227] Q. Pardon me?

A. My only answer to it has to of necessity be that this was demonstrated in the first part of the report which we call "Air Cargo—The Next Ten Years," where we show how much of the total traffic and what kinds of traffic moved by truck as compared with forwarders, as compared with rail carload, and so forth. So we saw that the faster means of transportation tended to move greater quantities of the high-value commodities.

Q. And you say that is substantiated in the first part of your report?

A. Yes.

Q. Could you point to where that is substantiated, Professor, in the report that is in front of you now?

A. No, sir. The part I am referring to is the one that—

Q. The Air Cargo?

A. Yes, sir.

Q. Can you point to it, Professor, if I show you a copy?

A. I will be delighted to.

(Document handed to witness.)

[fol. 228] A. This material is scattered pretty well throughout here. One of the places that we show this is that—

Q. Could you refer me to the page?

A. Page 48. We show the extent to which the motor vehicle has grown in terms of the total intercity ton-miles. We show the growth from 1939 through 1955. We show that this percentagewise has grown in terms of the total. We show that the air-carrier has grown in terms of the total. We show in other parts of the report that on an average basis motor carrier rates are considerably higher

than the rail rates and that here there is an apparent need for the faster forms of transportation and that these faster forms of transportation—the shippers are willing to pay higher rates for the faster forms of transportation for the service that they get.

Q. Steamships, Professor, also carry high-value commodities, don't they?

A. Yes, they have.

Q. So it is only where there is an emergency or a hurry to get the product from one point to another that you might use air. I know there are other factors, but the cost [fol. 229] of transportation, lack of emergency and what not would not necessitate, require or perhaps even make practical shipping by air, isn't that true, quite apart from the value of the commodity? The value of the commodity in and of itself, in other words, does not dictate to a shipper that he ship by air.

A. Well, depending upon what you mean by cost. If you talk about freight rates, you are talking about one thing. If you are talking about total cost, you are talking about something entirely different.

Q. Take either one, Professor.

A. If we compare ocean freight rates with air freight rates at the moment, why, there is little to compare. But when you start talking about savings in packaging costs, savings in inventory, savings in capital costs from having these things tied up in transit, why, we are talking about costs of an entirely different nature.

Q. Professor, isn't it a fact that your predicted growth of air cargo, namely, 4 billion dollars, as I recall it, is in part based upon your prediction of an increase in the gross national product?

[fol. 230] A. All forecasting has to be based on forecasts of economic growth.

Q. And if your prediction is correct on an increase in the gross national product, that would have a similar effect on sea cargo, would it not?

A. Oh, by all means, surely. We see direct correlation between sea cargo and gross national product.

RAYMOND A. NORDEN, called as a witness on behalf of the Government, being first duly sworn, testified as follows:

Direct examination.

By Mr. Peters:

Q. Mr. Norden, will you state to the Court your occupation, please, sir?

A. I am the president of Seaboard & Western Airlines.

Q. How long have you been in this position?

A. Almost 13 years.

[fol. 232] Q. Now to get back to the Seaboard & Western certificate, under your certificate to what places do you operate.

A. We operate from New York to Gander, to Shannon in Ireland, and we serve some 19 cities in the British Isles, France, Belgium, Holland, Germany and Switzerland.

[fol. 235] Q. Turning to your practical operation as a cargo carrier, how do you set about—first, let's name it. Can we name a few of the commodities which you carry presently on your international route between the United States and Europe?

A. Well, we carry literally thousands of commodities. They come under a general classification of all kinds of manufactures and semi-manufactures, and some foodstuffs, generally processed foodstuff, not foodstuff of grain and so on, and we carry significant volumes of live animals.

Q. Have you ever considered carrying iron ore or oil?

A. No, sir. We excluded that 12 or 15 years ago from our—

Q. Do you think there is any possibility in the future there will be any such volume of carriage of these commodities by air?

A. Well, sir, I could not look that far in the future. I wouldn't plan on it.

Q. Are there various products which probably you can carry which cannot be carried for one reason or another by ships?

[fol. 236] A. (No answer.)

Q. Let me rephrase the question. You have just testified that there are certain areas of bulk commodities, oil, minerals, etc., which are carried by ship which the airplane would not be interested even in attempting to go into that particular market. Is there a market, on the other hand, which might be considered the exclusive domain of the airplane as opposed to the ship?

A. Well, I think that is a fairly elastic domain, as you have made reference to it. Certainly there exists today certain kinds of highly stylized goods and articles. Take, for example, newsreel film and so on. It has a value of only X hours of life. I would say that it certainly could be carried on a boat too but it would not be productive to ship it and spend 12 or 14 days waiting for it, not today. Perhaps it would have 20 years ago. But the quantities today are those particular items which come to one's mind would not today be significant—volumes would not today be significant.

Q. Then can you state, Mr. Norden, that in between these extremes that there is an area composed of commodities for which there is an intense competition between [fol. 237] the air and sea?

A. Yes. I would say, again, the intensity of the competition would have to be a little bit qualified. It covers the whole range, I would say, of the manufactured and semi-manufactured goods. These are very substantial elements in what might be more generally described as dry cargo, and this whole field, in my opinion, is going to be subjected to intense competition. It is a gradual, developing intensity. We have been developing it in the last 12 years. I think, certainly, in our planning, the intensity of the competition is going to become much more severe in the next two to three years.

Q. Can you state, Mr. Norden, the relative value of this in between area; these manufactured and semi-manufactured goods or dry goods, the relative value as opposed to the bulk or the tonnage shipped?

A. Well, sir, we made a number of studies in developing our material for certificate process. It is hard to average values, in my opinion, because there is such a wide

range of articles that come within the heading of manufactured or semi-manufactured goods, and one has to be a little more specific, I think in the—at least this is the way we view it in our business. For instance, there are [fol. 238] textiles which are not sold by the pound and they are not valued by the pound. They are valued by the square yard.

And one has to develop on his own initiative, as a competing company, what the weight of a square yard is of a particular textile or group of textile products in order to arrive at a value per pound. These can vary widely.

We did some work in trying to establish a sort of a reasonable yardstick on a value per pound basis in our certificate case, and, if my recollection is good, I believe that we went as low as 50 cents per pound, and that was based on 1947 and 1948 data, which we upgraded to 1951. To a 1951 basis on general economic factors that we employ.

Q. Getting into the general economic factors a little bit more, as between air cargo and ocean carrier, can you describe to us the factors which you take into consideration in going after the transportation of various products or of a given product?

A. The major factor, of course, we take into account what it costs us to carry, and we do that on the basis of ton mile at a 100 per cent load factor. That is one of the ingredients that we inject into it.

[fol. 239] Then we study the economics of, say, an industry or an industry group, an association of marketers, or importers, exporters and so on, and we study the economics of the particular product that they are dealing in. We study the value of the product; we study the present mode of transportation which, in our international business, is always primarily ocean, but it almost always involves some surface transport to inland points.

We study the cost of that surface transportation from the point of origin, say, to the port of export. We study the actual cost of a shipment in terms of the shipping company's charge for carrying from port to port, and then we study the inland transportation costs from port of entry to point of final destination, and these include, that is, charges I was speaking of, that would include such

things as loading, unloading ports, drayage, perhaps, to a rail center, or two, perhaps, if it is going by surface by long haul trucker, the final destination.

There are multiple handlings involved. There are customs and documentation charges, so on.

In the case of surface transport we find that, as articles are shipped, to interior points, they may be crossing many [fol. 240] international boundaries and we find that in such surface transport there are multiple handlings required, multiple sets of documentation and that sort of thing. So there are many additive actual bill charges to a shipment, for instance, that may be originating in an interior point in middle Europe and destined to a point in Cleveland or some such place in the United States.

Then we take into consideration, if we are at or near a point where we think that a sufficient volume of business could be attracted to air on a regular basis, we study the warehousing costs, we study the insurance charges, etc., which are not part of the direct shipment necessarily but have to be part of the structure of the exporter or importer.

When these things are added together, we then find out what we call landed cost, that is the expression we use, and this is the real charge that the customer is paying for, and this is what we are competing against in terms of price, we in the airplane business.

Q. In connection with this landed charge, are you familiar, generally, with the way a steamship company derives its charges on dry goods commodities?

A. Well, in a general way, yes.

[fol. 241] Q. Would you state?

A. Well, charges are very often on a basis of so many dollars per ton, and they might vary. I am more particularly familiar with reference to the Atlantic area than any other area.

Q. I understand.

A. Charges might vary from \$25 to 40, 50, \$60 per ton.

Q. What does that mean? Does that have any effect on the kind of commodity that is transported?

A. Yes, it does. It has a significant factor.

Q. What effect?

A. Because those charges are assessed in many cases

on the basis of weight or measurement and what would appear at a very rough glance to be a price with which one might say he could never compete, that is, an airplane could never compete, when it applies to a particular product, the density of the article in question is such that it does not qualify for paying for just one ton.

I believe in the Atlantic conference—at least in the Atlantic conference—a ton, for rating purposes, is equal to 40 cubic feet, and the ton of which I speak is a long ton, that is, 1,000 kilos, and if you do the arithmetic on it, [fol. 242] you will find that every pound has to weigh 56—every cubic foot has to weigh 56 pounds, and this is pretty generally the area of things like coal, and I am—some of the ores, anyway, that range in that area of having a density of that type, but there are many, many items in the manufactured and semi-manufactured field, literally thousands of them, that do not qualify on the basis of poundage for the simple ton charge. For instance, the textile business is one of our very big fields. The density of textiles, in clothing and footwear and that sort of thing, taken as a sort of composite group, would be such that it would take four to five times the quoted tonnage rate if you were to move a full ton of them because they would occupy about four or five times as many cubic feet as is permissible for the long ton.

Q. When you are calculating for a product, the transport of a particular product, do you take into consideration the actual price it will be then to the shipper?

A. Oh, yes.

Q. Rather than the \$40?

A. Yes.

Q. That you gave?

[fol. 243] A. Yes, and actually, when we make the studies on an industry basis or an association basis, as we have done, they examine the files, they do the examination, and they tell us and so on.

Q. You testified a moment ago that the airplane is not competing against a steamship rate as such but against the landed charge. Do we take from that that the actual steamship rate is not so particularly important?

A. Well, it doesn't have the import that one would attribute to it if one hadn't made a real examination of it.

To put it another way, I think generally speaking, in the air industry, the large part of the air industry has not, in prior years, studied and determined the more limited importance which we attribute to the low ocean shipping rate as such.

Q. What is your recommendation along that line? What is your suggestion?

A. My suggestion?

Q. What is your opinion with respect to this more or less oversight?

A. Well, suggestion along the line of—

Q. Yes, where is the error? What is the basis of this error?

[fol. 244] A. I think it is one that has not been made consciously. It is just the overall impact. Even people in trade, even traffic managers themselves, have assumed, quite arbitrarily, well, the airplane that they—50 cents a pound to fly freight from New York to Europe; this couldn't possibly be a good idea for him because he could get it shipped for \$50 a ton, if he had it to ship, and it is the wide variance between air freight rates, as we have known them, and shipping rates, as we know them, that has been so startling that people really haven't thought it was worthwhile examining, and it isn't until you examine into it that you find a good part of the trade doesn't, in fact, go at \$50 a ton on the surface, it goes at 150, and it goes at 200 and, in some cases, \$250 a ton.

This immediately narrows the gap between the surface ship, in the field of commodities to which I have reference, and the airplane because the cargoes that are now being charged for at \$200 a ton, and I am speaking now of a measurement ton, are not as widely separated in basic transportation charge from the air rates, many of which are in the vicinity of \$800 a ton today on the Atlantic.

Q. Let us see if we can expand a little bit here in terms [fol. 245] of weight. We seem to be emphasizing, as you noticed, from the first witness the idea of weight, a ton mile. Does it appear that, as far as the ton miles carried, that the air carrier will ever take up a large share of the market measured in ton miles?

A. I could answer your question: Ton miles in our busi-

ness, as such, are an interesting statistic but that's all. We don't measure, ourselves, in terms of ton miles.

Q. What is your measurement?

A. Well, our measurement is in tons. This may be our own fault, I am speaking now of the industry; speaking internationally, but, to be truthful, we have to think, really, in terms of the tons, or pounds, kilos, or weight measurement, because we are unable to associate ton miles on any basis of what the international air carriers are doing, as that would serve as an index to progress in increasing the air share of the surface ton mileage traffic. The reason is that we don't report origin, destination of traffic. It is a jealously guarded secret and the industry doesn't report it.

So if we had all the ton miles of all the international carriers, why, we would be in overlapping areas and we [fol. 246] would not—we would have just an interesting statistic, so many ton miles carried, but it wouldn't reveal—

Q. What is your yardstick?

A. We stick to the tonnage, and we so report, and the industry. For instance, on the north Atlantic, I think, there are 16 air carriers, including Seaboard, we report total tons, kilos, pounds, numbers of passengers, etc., that fly over the Atlantic, but no one reports how far over the Atlantic they flew, or where they got off or where they got on.

Q. Now, in connection with this measure of pounds which you fly as measured to the total amount of pounds or tons carried by ships and the total pounds carried by air, that figure is ridiculously low, is it not?

A. Yes, sir, it certainly is.

Q. Are we using the proper—are we using the proper measurement in using this figure of weight to measure the competitive effect between air and sea?

A. No, I would say not. I think the competitive effect comes into revenue.

Q. In revenues?

A. Yes.

[fol. 247] Q. How do you go about measuring the competitive effect in connection with revenues, or what is your analysis of the competitive effect as measured in terms of revenue between air carrier and ocean carrier?

A. Well, I could say, generally, that the competitive effect will be—the adverse competitive effect on steamship operators would be disproportionate to the effect one might deduce by examining the tonnage loss from surface to air. I have not made a study of that.

Q. Well, let's see. This area of competition in dry goods, which you have already set forth, is measured in terms of high value, is it not?

A. Yes, and my interpretation of high value is, as I understand it, when I say yes; is the kind of values that have been talked about, 50, 70 cents a pound, that sort of thing, and in our view these are high values as compared to the values of the bulk, of the bulk goods, which are the ores and the oils, and grains, and that sort of very heavy cargo, which are carried by the bulk carriers.

Q. Can you tell us whether or not in your opinion the shipper is interested in the dry goods market—

A. Dry cargo market.

[fol. 248] Q. Dry cargo market.

A. Yes, very definitely.

Q. Would you have any idea as to what relation that plays to the bulk market?

A. No, sir, I don't, because when we first started our studies, 1946, we just eliminated the chore of looking into that volume of bulk cargo carriage. I just don't know what it is. We have never looked at anything except what I generally refer to as the dry cargo potential.

Q. Drawing your attention now, Mr. Norden, to the development of aircraft—

The Court: Excuse me. If this is a new subject, maybe it would be appropriate to adjourn now for lunch.

Mr. Peters: All right. Thank you.

The Court: 2:15. If it makes any difference, there is a judges' meeting today at 4, so we will have to adjourn at 4 o'clock.

(Recess until 2:15 P.M.)

[fol. 249]

Afternoon Session

2:15 P.M.

RAYMOND A. NORDEN, resumed.

Direct examination (continued).

By Mr. Peters:

Q. Mr. Norden, will you please state for the Court the range of products which Seaboard and Western carries in air cargo transportation?

A. Yes, sir, if I may refer to a listing that I made.

Q. Yes.

A. Carried live animals, foodstuff, furs, skins, leather goods, tobaccos, essential oils, textiles, clothing, footwear, silverware, cutlery, aircraft, aircraft engines, aircraft parts, surface vehicles and surface vehicle parts, heavy machinery and heavy machinery parts, business and office equipment, electrical equipment and electrical appliances, machines and machine tools, hand tools, ceramics and glassware, synthetic stones, chemicals, drugs, pharmaceuticals, cosmetics, newspapers, scientific instruments, dental and surgical instruments, musical instruments, radios, phonographs, phonograph records, microscopes, spectroscopes, optical goods, newsreel films, watches, clocks, jewelry, toys, handbags, furniture, household goods and personal effects.

[fol. 250] Q. You had reference back there to surface vehicles. What does that term include?

A. Well, that includes all kinds of surface vehicles, whether they be automobiles, trucks, self-propelled ground power units, tow trucks, that sort of thing, the kind of vehicles you find in warehousing operations.

The Court: Excuse me. What was the total tonnage, the payload? How much does that weigh? In your Super Constellation what is the maximum load you carry?

The Witness: 18 tons, sir.

By Mr. Peters:

Q. Among this range of products which do you carry in significant proportion?

Mr. McKay: Your Honor, I would like counsel to explain what he means by "significant proportion."

The Court: Well, somebody is going to explain it. Let's try this answer first.

Do you understand the question?

The Witness: Yes, I understand the question.

The Court: What products or what merchandise?

The Witness: As I mentioned earlier, textiles is a product of which we are very much aware. Textiles, cloth and [fol. 251] clothing, that general group we carry in what we consider to be substantial volume.

The Court: In other words, you meant by "significant" substantial.

The Witness: Yes, sir.

By Mr. Peters:

Q. Can you state the significance in terms of dollar value or, if not in dollar value, by pound value? I mean in terms of number of pounds carried, say.

A. Yes, I could more easily state it that way. I would say our volume—and I am speaking now of Seaboard's volume, not the total volume in the air—in that group approximates 600,000 pounds a year.

Q. Of each of these products?

A. Well, this general group of which I spoke. Household furniture and personal effects I would say is very close to a million pounds a year that we carry.

Q. Are these same products carried by the ocean carriers?

A. Oh, yes.

[fol. 252] Q. Who carried the products before you started to carry them?

A. Well, in our business there were only boats between the United States and Europe.

Q. Could you state to us, Mr. Norden, some of the advantages about air cargo transport over ocean carriage?

A. I think the biggest single factor is the factor of time and that in itself produces a number of advantages. With the shorter transit time, let us say, a day or two days, compared to 14 to 18 days, in our area, it makes possible reduction in warehousing facilities. These are physical properties that have to be maintained, leased, owned and

depreciated and have with them, have associated with them, labor cost for personnel to run them and so on.

Reduction in time reduces the need for warehousing facilities.

The reduction in time results in a significant reduction in the dollar value tied up in the pipeline, the importer's or exporter's dollar which is tied up in his surface moving pipeline for a greater number of days. This can reflect itself in his ability, by using air, of doing many times the [fol. 253] volume of business that he can do if he uses surface with the same capital. Also reduces the cost of capital, cost of interest of the capital that is tied up, and so on, for the longer period.

Another advantage is the question of insurances, which must be borne somewhere, either by the exporter or the importer. Insurance by air is, as the air has developed—is significantly lower than the cost of insurance by ocean primarily due to the pilferage problems. I would say, on the order of—ocean shipment methods would carry insurance rates that are four to five times as high as air rates.

Those are some of the advantages that come immediately to mind.

The Court: You explained the different advantages that flow from the saving in time. Are there any other advantages like time that you can relate?

The Witness: Yes, it is a very significant matter, which is the ability of the customer to measure its market more nearly at the time that his market is turning from a projection into a reality.

With the use of air as a method of distribution, the customer can, as a regular basis of distribution, the customer can tailor his requirements more nearly to the conditions [fol. 254] as they actually pertain, more or less of a concept that it is easier to predict tomorrow's weather than it is the weather a month from tomorrow or six months from tomorrow.

Those are significant, especially in terms of wholesale and retail trade, because they have to project their requirements to a future market and they run two risks, which are calculated risks, one, when the market actually takes place, they may have considerably less on hand than

they could sell and, two, they could have much more on hand of the wrong kind of article and are unable to sell, which result in post-season sales, and all that sort of thing, where they attempt to just get their actual cost out of the goods that are excess to the market requirements.

Q. Mr. Norden, I would like to turn your attention a little bit to the future. I believe you have referred to a recent period of the history of the air cargo transportation as the developmental period. What are the prospects for round the corner?

A. Well, I am very bullish. I think the prospects of the next—of the period in from two or three to five years are very substantially greater than; I think, anyone has ever envisioned.

[fol. 255] Q. Would you state the basis of this opinion?

A. Well, my basis for it is that all the years that we have been developing this air cargo to attempt to make it into a business we have been fighting the fact that we have to use vehicles that were not intended, were not designed and, therefore, have none of the features that make them really desirable or adaptable for the carriage of cargoes. This has been a period in which we have had to make do the vehicles that result as a by-product of the passenger airplane, we will say.

Many of the airplanes that had been in prior years used in the airplane freight business were in fact just converted from passenger airplanes into freight, and whilst they did a job of carrying, they did so at a very high cost. This is expressed in various terms but most commonly in terms of ton mile cost.

Q. In a comparison of your present airplane with the new airplane, in respect to this cost per ton mile, what is your present cost on your Constellations?

A. On our routes our direct costs, I will put it on that basis for comparability, would be between 10 and 11 cents per ton mile, per available ton mile, and our indirect costs [fol. 256] would be about 5 cents, something slightly less than 50 per cent of our direct costs per available ton mile.

Q. So that the projected cost per ton mile will be reduced—what would be reduced?

A. You mean with the kind of airplanes which the industry is examining today?

Q. Yes.

A. And so on?

Q. Yes.

A. Well, I think there is a range of airplanes, certainly three or four, five, that we have examined in considerable detail and, broadly speaking, they all can be operated at a direct cost of between three and a half and four cents per available ton mile.

Q. What do you predict to be the significant result of this reduction in cost per ton mile?

A. Well, the big significance is, of course, that the air carriers can, with a vehicle that operates at these much lower costs, can set in a rate structure that is considerably lower than the one that pertains today with the vehicles we operate today, and with the lowered rate structure we have no doubt at all about the penetration that can [fol. 257] be made in surface moving cargoes.

Q. I believe in response to the Court's question awhile ago you stated that the available tonnage of your present airplane was around 18 tons?

A. Yes, sir; on our routes we can operate—

Q. Can you project a little bit into these airplanes which you refer to as their tonnage capacity?

A. Yes, sir, the airplane which we have examined we have examined on the basis of putting them in operation on our routes, and on our routes, the different airplanes will carry from about 34 tons to 50 tons, or slightly over 50 tons, depending on which airplane is in question.

Mr. Peters: You may examine.

[fol. 258] Cross examination.

By Mr. McKay:

Q. Mr. Norden, how long has Seaboard & Western been in business?

A. Since the fall of 1946, and our first revenue flight was in May of 1947.

Q. Approximately 12 to 13 years.

A. Yes, that's right.

Q. I think you and Mr. Peters referred to your operation as being in a development stage? .

A. Yes, sir, that's true.

Q. Would you regard it, Mr. Norden, as being in the experimental stage?

A. The first nine years, I would say, we were in the experimental stage. I don't regard it as being in the experimental stage any longer. We are in the development stage now.

Q. You are aware of the fact, however, are you not, Mr. Norden, that the Civil Aeronautics Board just a month or two ago has said that "scheduled trans-Atlantic air freight transportation is in the experimental stage"?

A. I believe they said that.

Q. You disagree with them?

A. Yes, sir.

[fol. 259] Q. When you say you believe they said that, are you familiar with the Board's decision in Seaboard & Western Airlines' application, the decision dated April 7, 1959?

A. Very much so.

Q. You have no doubt that they did say it. I can show it to you if you have.

A. Oh, I didn't mean to—yes, I know they said it.

Q. Thank you. Mr. Norden, where does Seaboard & Western derive their income from? What are the various sources of their income? Breaking down this general cargo, have you any passenger business at all?

A. We are not authorized and never have been to engage in the carriage of passengers. We have—

Q. Pardon me.

A. I have to amplify the answer.

Q. Surely.

A. We have from time to time and in very small volumes carried passengers pursuant to special exemptions which the Board has from time to time granted. For instance, in the movement of some of the what is generally termed refugee movements and that sort of thing, we have en-
[fol. 260] gaged in very limited, not significant volumes of that pursuant, in each case, to special exemptions.

Q. Could you subdivide, if you will, the income? In other

words, do you carry cargo for the military under contract to the military?

A. Under contract? You mean as contract carriers?

Q. Do you carry military cargo, Mr. Norden?

A. Yes.

Q. And do you do that under contract with the Government?

A. Oh, we do it under charter. Is that what you mean?

Q. Charter?

A. Yes.

Q. Is that the only way you do it, Mr. Norden?

A. That's all.

Q. And then you have commercial cargo.

A. We have commercial cargo.

Q. Have you any other sources of income?

A. Yes.

Q. What are they?

A. We have for many years engaged in what is termed [fol. 261] wet lease operation for other airlines.

Q. You lease your planes to other airlines?

A. Wet lease.

Q. Would you please define that term for me?

A. Yes, sir. Perhaps a better definition can be found in the CAB orders, but roughly it means that you operate the airplane, you furnish the gas and oil, the maintenance, the flight crews, all the enroute services and so on to the vehicle for which you are paid a price. The airline to whom you so lease the property and facilities furnishes all the traffic, whether it be cargo or passengers and so on.

Our wet lease operations have been primarily in the passenger field, to other airlines on the North Atlantic.

Q. Do you lease these planes under a wet lease, as you call it, Mr. Norden, because of a lack of cargo business of Seaboard & Western?

A. I can't subscribe to your terminology.

Q. Has Seaboard & Western an excess of planes?

A. No, sir.

Q. Could you explain to us, Mr. Norden, why you wet lease your planes rather than use them in the air cargo business? Is it more profitable to wet lease them than [fol. 262] carry air cargo? Or what is the reason? That is what I am trying to get at.

A. In a development business such as we are in and have been in it is necessary to maintain a certain structure in a far-flung route system. In order to give proper service to your essential business, which in Seaboard's case is freight, to do so in a developing business you can take two roads: You can amass a great amount of capital and keep spending your capital and concentrate solely on the development of the freight, taking the losses as they come as a part of your capital cost of investment; or, if you don't have that very substantial volume of capital, you can engage in other activities which are economic and which contribute, make a significant contribution to the burden, the cost, the size of the structure, minimum size of structure that is necessary in order to service your basic business. That is why we have engaged in wet lease operations.

Q. Certainly, Mr. Norden, you would not, as a prudent business man, lease, wet lease or otherwise, your planes if you had air cargo to move, would you?

[fol. 263] A. That's correct.

Q. If you had use of those planes to move your air cargo?

A. That's correct.

Q. In fact, Mr. Norden, isn't it true that Seaboard & Western at times has found it necessary to cancel flights and to cancel various points of call because of a lack of air cargo?

A. I think that's true. I think it is generally true in the airplane business.

The Court: Even passenger planes?

The Witness: Oh, yes, certainly.

By Mr. McKay:

Q. How frequently have you found it necessary to cancel flights or points of call because of a lack of air cargo? I know it is hard to give a precise figure, but can you say it occurs frequently, occasionally or very seldom?

A. I would say that up until the last year it has occurred occasionally. During the last year it has occurred to a much lesser degree.

Q. And prior to that?

A. To a more substantial degree.

Q. Is that what occasioned the Civil Aeronautics Board [fol. 264] to call Seaboard & Western's performance a poor performance in this decision that I have referred to?

A. I don't know.

Mr. Peters: This witness cannot know what is in the mind of the Civil Aeronautics Board.

Mr. McKay: He is familiar with the application that the company made.

The Court: You did ask him as to whether he knew the reason why somebody said something. They might have been mad at him.

By Mr. McKay:

Q. Do you agree with the Civil Aeronautics Board when they state that Seaboard & Western's performance has been a poor one?

A. Sir, I don't know what they are talking about there. If you will let me read it, I will refresh myself. I haven't looked at that.

Q. Have you seen that before?

A. Oh, sure. I was interested in the end of it.

(Document handed to witness.)

Q. To save you time, Mr. Norden, as far as I am concerned, you may read the whole decision, but I am referring [fol. 265] only to that one sentence, and I would like to know whether you agree with their description of Seaboard & Western's performance or not.

A. Well, I think what they were referring to there was a particular period of time. If I recall correctly, it was a period of about two months or something like that.

Q. It is your understanding that—

A. Occurring in 1958, and that—

Q. It is your understanding with reference to this Board's decision that, when they characterized Seaboard & Western's performance as an poor one, they were referring to only two months in early 1958?

A. Yes, I believe so.

Q. I see. Let us take the year 1957. Mr. Norden. Isn't it a fact that Seaboard & Western lost \$401,000?

A. Whatever we lost is in the annual statement, sir.

Q. You don't know?

A. I haven't looked at it lately.

Q. Do you know?

A. Somewhere like that, yes.

Q. Approximately.

[fol. 266] A. That's right.

Q. Isn't it a fact that Seaboard & Western ended the year 1958 by incurring substantial operating losses?

A. Yes, sir.

Q. Staying with the year 1957, Mr. Norden, what percentage of Seaboard & Western's business was with the military, approximately?

A. I would have to refresh myself with an annual report.

Q. If I were to tell you that your annual report shows it was 47 per cent, would that refresh your recollection?

A. If it is in the annual report, it is accurate.

Q. Do you know what percentage of Seaboard & Western's business in 1957 was commercial cargo?

A. As a percentage?

Q. Yes, sir.

A. I don't recall whether we so described it in the annual report.

Q. If I were to say that it was approximately 30 per cent, would that be roughly accurate?

[fol. 267] A. If it is in the annual report, it is absolutely accurate.

The Court: That leaves me in the dark.

Mr. McKay: I know, your Honor. We will obtain a copy.

By the Court:

Q. Can't you say now from your recollection as president approximately what was the revenue, your gross revenue from commercial cargo?

A. Well, sir, this is a statistic which, if I may explain why, I can tell you—

Q. The answer is no, you can't say?

A. I can't say with preciseness related to the percentage figures because this is a statistic which some years ago the SEC insisted we put in in an offering prospectus, and it is a constructed statistic, and they have asked in 10-Ks

and other required reporting forms that we continue to do it, and it became a habit. It really has no significance in the management of the company and in the affairs of the company. It is a statistic, and we have been putting it in because it was required by the SEC.

Q. You are not able to give an estimate as president of the company as to what percentage of your revenue [fol. 268] came from commercial cargo?

A. I don't believe that is—I don't believe that is the percentage statistic.

By Mr. McKay:

Q. What would you say, Mr. Norden, is your best estimate as president of the company?

A. We did about a little over \$7 million in cargo in 1957.

Q. Military and civilian or just civilian?

A. Both combined in cargo. I don't believe our military cargo in 1957 was very significant. I doubt if it was a million dollars.

The Court: Well, you just told the lawyer that your military cargo represented about 47 per cent of your revenue.

The Witness: I don't believe that is what the statistic—that is a conclusion, I believe, sir. I believe that refers to total revenues, and in 1957 we did many millions of dollars in revenues for the military in the carriage of dependent personnel across the Atlantic in both directions.

[fol. 269] Q. Are you familiar, Mr. Norden, with the fact that four domestic cargo carriers have described their condition as critical and have applied to the Civil Aeronautics Board for a subsidy?

A. Yes, sir.

Q. One of the witnesses here yesterday, Mr. Giles of Riddle, explaining his company's critical condition, described it as due to mismanagement. Would you say that [fol. 270] your losses have been incurred by reason of mismanagement?

A. No, sir.

By the Court:

Q. Prior to getting your certificate, you never got any subsidies from the Government, did you?

A. No, sir, we get no subsidy from the Government even now, sir.

Q. Even now, carrying mail?

A. No, sir. That green order that counsel referred to specifically sets it forth; not eligible.

[fol. 271] Q. What do you carry for the military, Mr. Norden?

A. All manner of routine resupply items that military forces need in the field and routine—

Q. Could you give us some examples, Mr. Norden?

A. Sir, the best way I could cite it to you is to say that, if you went to a department store, you would see everything that we carry to the military.

Q. Do you carry household effects for the military?

A. Yes, sir. We carry everything you can buy in a drug store, everything you can buy in any bargain basement or clothing, spare parts for radios, radio equipment. Everything you could find in any general merchandise store we carry for the military as a routine resupply job.

I might say, sir, that's exactly the kind of item which the military send on Government bills of lading on ocean vessels and surface rail and truck freight. We are unique in the air business that it is grouped together and handled [fol. 271a] in the agency within which it is handled. This does not occur within the military organization in any other military department except the Air.

This kind of volume in all the statistics of rail, freight and ocean carriers is all regarded as freight. It is not distinguished from commercial shipments.

[fol. 272] Q. I inquired of you, Mr. Norden, concerning the year 1957. Can you tell the Court today what percentage of your business is with the military, and what percentage is civilian, and what percentage is leasing—whether leasing or otherwise, currently speaking.

A. Our business has undergone considerable revamping in the last year. Some very significant matters occurred.

During part of 1957—of 1958 and a month and a half of 1959, at various times; we did have a right to carry mail pursuant to an exemption. At other times court actions intervened and the order of the Board was rendered null and void for temporary periods. In those periods we did not carry mail. This inability to carry mail, even though it was temporary, caused us to shift more of our vehicles into air freight service as such. That, plus the fact that the military procurement concepts underwent another of a long series of changes last year, and the business to which I alluded a little bit ago; namely, the carriage of passengers for the military, which was a very substantial volume in almost every one of our—of the past four or five years.

Q. Seaboard Western did carry military personnel at [fol. 273] least four or five years?

A. That was pursuant to contract for carriage of passengers.

Q. You could say the Seaboard Western was very dependent on its military contract, wouldn't you?

A. Sir, Seaboard & Western is dependent on all the business that it can do.

Q. Without the military contract, on the shifting of Seaboard & Western to civilian cargo movement your losses would be much greater than they are, is that not a fact?

A. If we maintained the identical structure that we maintain, having such business, you are correct.

Q. You could always—

A. Arithmetically it could be arrived at.

Q. You could always sell off the company's planes and what not and reduce your company down to a few planes just to contain the civilian cargo, is that what you meant, if you kept the same structure, planes not necessary for the movement of military personnel and cargo?

A. It isn't only the cost of the airplane, sir. It is, for instance, the cost of maintaining equipment. These are very, very substantial to do the job properly. The main- [fol. 274] tenance, installation, all by itself, has to be a very sizable proportion to do it effectively and render service.

Mr. McKay: Will the Court bear with me for a moment?

(A pause)

Mr. McKay: That is all.

Mr. Peters: A couple of questions.

Redirect examination.

By Mr. Peters:

Q. Mr. Norden, how is the stock of Seaboard & Western distributed?

A. Well, our stock is registered and traded regularly on the American Stock Exchange. I believe we registered it, I think, in 1952. It is traded daily. We have about 4,000 shareholders in every state of the Union—perhaps in excess of that, there being so many—

The Court: I think he wanted to know how many shares were outstanding.

The Witness: Is that what you are asking?

Q. How are they distributed?

The Court: Keep your voice up so everybody can hear you.

A. You mean how many shares of stock are outstanding?
[fol. 275] Q. Yes.

The Court: Yes.

A. Just short of a million shares.

Q. Do you know what the going rate of that stock is on the Exchange?

A. I think it is probably between thirteen or fourteen dollars. Somewhere like that.

Q. Do you think, Mr. Norden, that Seaboard & Western is a going outfit?

A. Yes, sir.

Q. Do you have any knowledge of whether or not Grace Line gets a subsidy from the Federal Government?

The Court: Let us get on here. Haven't shipping companies, since they started building ships, gotten something?

Mr. Peters: I suppose so. I was just going to ask the witness whether he thought -

The Court: I know what they get. They are doing all right.

Q. How about the National—

Mr. Peters: Well, all right.

Mr. McKay: Your Honor, I am advised by my associates that we looked at the 1957 annual report of the American Stock Exchange. We haven't got a copy available.

[fol. 276] The Court: I think counsel agreed you could offer it in evidence.

Mr. McKay: I was wondering whether Mr. Norden would supply us with a copy? Ours is in the American Stock Exchange.

The Witness: Gladly.

Mr. McKay: Thank you.

Q. Do you know whether or not, Mr. Norden, Panagra lost money last year?

A. I would be guessing. I don't really know.

Q. Do you know whether or not Panagra has applied for a six million dollar subsidy?

A. Yes, I know.

Q. Would you say that was because of the mismanagement of Panagra?

A. No, sir, I wouldn't say that.

The Court: All right, next witness.

(Witness excused.)

ROBERT STOESEL, called as a witness on behalf of the Government; having been first duly sworn, testified as follows:

[fol. 277] Direct examination.

By Mr. McConnell:

[fol. 278] Q. Are you familiar with the developments made by Lockheed in cargo planes?

A. I think so, yes.

Q. Using the chart, could you explain to the Court what Lockheed has done in the way of payload ranges? Does Lockheed have a large cargo plane in operation at the present time?

A. Yes, Lockheed a Super Constellation in operation at the present time commercially and it has the Hercules C-130 in operation militarily.

[fol. 279]. Q. Have you developed another plane?

A. We have developed the C-130, originally designed in California by the same people as designed the Super Constellation and then put into production in our Georgia Division and over 200 of those are now flying with U.S. Force and also with the Royal Australian Air Force.

Q. None of those planes are in commercial use at the present time?

A. None as yet, no.

Q. Can you describe in detail some of the problems which you solved when you made this plane?

A. I think one of the biggest problems, and one that we wouldn't have been able to solve, nor would, I think, anybody in the industry have been able to solve 15 years ago was the ability to have an end load airplane with a door, [fol. 280] maximum door and width of cargo compartment and still have it pressurized. That was a structural job which was almost beyond, I think, in fact beyond the state of the art 15 years ago.

Q. Is this a picture of the plane that you are referring to?

A. That is right, the picture of the back end of the plane showing the big door.

Q. What is the payload of that plane?

A. The military airplane is not on those charts, but the commercial derivative is the red line and, for international operation, which means with international equipment, etc., it is 42,000 pounds to about 2,200 statute miles.

Q. Have you gotten this plane, the Hercules, into advanced state of production, advanced state of development?

A. Yes, I think so. It is in advanced state of production, as this military version, and the commercial is in advanced state of design.

Q. What else does Lockheed have as plans for the future?

A. We also have the Super Hercules, which was announced, as a matter of fact, in Las Vegas about two weeks [fol. 281] ago, and it is shown on that chart with the designation GL, for Georgia Lockheed, 207. That airplane has been stretched both as regards increasing the length of the fuselage and as far as increasing the wing area and the fuel capacity, and it is an intercontinental type of airplane.

Q. Payload 80,000?

A. That is right, 78,000 pounds to about 1,700 miles.

Q. Part of this line, this point, is 1,500 miles?

A. That is the point at which the maximum take-off we think has been attained, and any additional fuel required to make a greater distance at that point must be loaded on at the expense of payload.

Q. In other words, this is for a flight of 6,000 miles, is that correct?

A. 6,000 is what we call the theory range of distance which it can carry a verbal message.

Q. Is this plane specifically designed for commercial cargo?

A. That plane is designed specifically for commercial military logistic support or commercial—

[fol. 282] Q. Commercial cargo. Are you familiar with what the other manufacturers are doing at the present time?

A. Yes, I believe we are. We try to keep up to date.

Q. What is Douglas—I don't want to get you into a competitive situation. They have made great advances, have they not?

A. Douglas is one of the manufacturers who is proposing an intercontinental air freighter, yes.

Q. Is Convair doing the same?

A. Yes.

Q. Boeing doing the same?

A. Yes.

Q. How long do you think it will be before this fleet is in actual operation in commercial cargo?

A. You mean the large airplane, the 207 type or all of these?

Q. The first is going to be the Hercules that is going to break through?

A. That is right, and that would be delivered the last part of 1960, and the Super Hercules can be delivered in the last part of 1961.

Q. By how much do you think the putting into operation [fol. 283] of the Hercules and similar planes will increase the carriage of air cargo?

A. I would have to run a check, if I may.

I would judge 20 to 25-fold because of the decrease in rates which can be afforded with that airplane.

Q. That is the Super Hercules?

A. That is right.

Q. How about the Hercules that is coming in just now?

A. That is about five times. This is the estimate of one forecaster and forecasters have variations in their manner of making estimates.

[fol. 289] Q. So that how much do you think the Super-Hercules will decrease or the Hercules family will decrease the indirect costs?

[fol. 290] A. The indirect costs, that portion or those portions attributable to documentation and loading, will be decreased by a system such as this mechanized loading, and I really think that all in all we will get our indirect costs down to about half of the present values. We estimate 2.5 cents per available ton-mile.

Q. So that would make a total ton-mile of the Hercules of about 7 cents?

A. About 8 cents or 8½ cents in the Hercules and about 6½ cents—

Q. Six and a half cents?

A. —on the Super-Hercules, yes.

Q. Ten years ago what would have been the cost of the airplanes and the operation at that time?

A. Well, 10 years ago you had the C-54, about 10 cents per ton mile.

Q. That is just the direct?

A. That is the direct.

Q. And combined with the indirect?

A. I think the indirect in that case, with the magnitude of the movement of freight, was at least 6 cents per available ton-mile, so that would have been a total operating cost, at 100 per cent load factor, of at least 16 cents per [fol. 291] ton-mile.

Q. And in that time you are now going to reduce it to around 8 cents a ton-mile?

A. And even less than that with the Super-Hercules.

Q. With the Super-Hercules?

A. Six and a half cents with the Super-Hercules compared with 16.

Q. And you feel that with these new vehicles the tonnage of air cargo carried will increase twenty-fold?

A. I think it will. According to the data which our own people have worked up, it will increase twenty to twenty-fivefold compared with the tonnage today with the DC-6As and the Super-Constellations.

[fol. 359]-

New York, May 18, 1959,
10.30 a.m.

S. ROBERT MITCHELL, resumed.

Cross examination.

By Mr. Mallory:

Q. Mr. Mitchell, in your long experience in the Government in your economic and statistical positions have you ever had occasion to engage in research or economic study relating to international air transportation before this case? [fol. 360] A. No, sir, not on a very extensive basis.

Q. Before we get into questions relating to specific exhibits of yours it might be helpful to put your statistics into some proper perspective. In that connection I believe you quite candidly acknowledged in your direct testimony that Exhibits 32 through 66 were not completely accurate; is that correct?

A. I don't think your word "accurate" is quite right. I don't know whether that is quite what you mean to say. I presume they were collected accurately by the Immigration

and Naturalization Service. I have no knowledge that they were incorrectly—inaccurately—collected by that agency. What I have indicated in my statement is what they purport to show, but I presume they are accurate.

Q. Do you have a copy of your testimony, Mr. Mitchell?

A. Yes, I have.

Q. Would you turn to page 31 of your testimony, Mr. Mitchell.

A. Yes, sir.

Q. Question in the middle of the page, referring to the statistics:

[fol. 361] "Q. Are they completely satisfactory, Mr. Mitchell?"

"A. No, they are not completely satisfactory."

Is that your testimony, Mr. Mitchell?

A. Not completely with respect to the Immigration and Naturalization statistics.

Q. All right.

A. That was a statement with respect to—

Q. That is all. I have finished my question.

A. I haven't finished explaining what my answer referred to.

Q. That is responsive to my question.

A. No. The only question was was that what you said on page 31.

Q. Would you turn to page 32 of your testimony, Mr. Mitchell?

A. Yes, sir.

Q. You were describing on page 32, I believe, Mr. Mitchell, the limitation of the OD series used by you in your statistics, were you not?

A. Yes, sir.

Q. Would you turn to page 33 of your testimony, Mr. Mitchell?

[fol. 362] A. Yes.

Q. At the bottom of that page you state, I believe, Mr. Mitchell—you may correct it if you wish now—that the coverage of INS statistics is larger than the OD series and that therefore it may slightly overstate the position of Pan American and Panagra when you use these statistics; is that correct?

A. No, sir. I submitted a correction of that sentence to all the defendants in which the word "larger" should be changed to "different" and the word "overstate" should be "affect."

Q. How does it affect the statistics, Mr. Mitchell?

A. The coverages of the two series are different. In one way it may affect it upward. In another way it may affect it downward. There are compensating effects.

Q. And does that make for complete accuracy, Mr. Mitchell?

A. The series as individually reported are accurate to the best of my knowledge and belief, yes, sir.

Q. Completely accurate?

[fol. 362a] A. To my knowledge they have been collected accurately by the CAB and the Immigration and Naturalization Service.

[fol. 363] Q. Now, on page 34 of your testimony, Mr. Mitchell, you say that the results would not be significantly different than you would get from an elaborate detail than costly study, that there may be a few percentage points either way; is that correct?

A. That was with reference to the use of both I.N.S. and CAB figures in combination with each other.

Q. You mean comparing the two?

A. No, using them together. I wouldn't say I am comparing the two, no. I am using them in conjunction with each other. If you were to prepare the statistics from one source rather than from two, where different collection procedures are used, there may be a little difference in the result because of the difference in the collection procedures.

Q. There is a difference in the collection procedures in the two series.

A. Yes, sir.

Q. Then, do you now state that to the best of your knowledge, your figures, these statistics, are completely accurate?

A. Oh, no, sir.

Q. All right. Now, let us look at your Exhibit 32 for the [fol. 364] moment, as an example. You compare their March and September figures for U.S. flight carriers; is that correct?

A. From the O.D. survey of the CAB I show March and September figures.

Q. And for the I.N.S. statistics for foreign flag carriers, you average or make a monthly average from the entire year's figures, do you not?

A. That is correct.

Q. Did you make any tests, Mr. Mitchell, to determine whether March and September are representative months for flag travel, air travel, between the United States and South America?

A. You said "flag travel"; do you mean—

Q. Air travel?

A. Did you mean U.S. flag travel?

Q. Air travel of any kind?

A. I only used March and September for the U.S. flag airlines, as is clearly shown in the exhibit.

Q. I repeat—

A. (Continuing) There are not available from the O.D. survey, except for March and September—

The Court: The question was whether you made an independent search to determine whether March and September [fol. 365] were the correct months to show the good average?

The Witness: It is a little hard to make a comparison when figures are not available.

The Court: The answer is no?

Q. Mr. Mitchell—

A. I will say this:—

Q. I think you have answered the question, Mr. Mitchell, and I take it, your answer is that you did not make any test to determine whether March and September were representative months—

A. That is not—

Q. —for air travel between the United States and South America as a whole; is that correct?

A. That is not completely correct.

Q. What tests did you make?

A. I could not make any test based on the O.D. survey or the CAB, but I did compare statistics for the I.N.S., for the months of March and September, with the O.D. figures for the months of March and September, and I can give you those results right here.

Q. Mr. Mitchell—

A. (Continuing) I have not completed my answer to that question.

[fol. 366] The Court: No, but so far it is not responsive. The only thing that counsel seems to be interested in is whether you made an independent search to determine whether March and September were the reasonable average months for air traffic?

A. I made some study, yes.

Q. What study did you make?

A. All right. I compared statistics from the Immigration and Naturalization Service, U.S. flag total for the year, divided by 12, which would make a monthly average, with the monthly average for the two months, which may be compared with the average for the two months of March and September.

Q. Did you compare the March and September I.N.S. statistics for foreign flag carriers with your average monthly statistic for foreign flag carriers in your GS32?

A. Yes, I did. For the—

Q. What is the result of that comparison?

A. For the months of March and September the Immigration and Naturalization figures for foreign flag traffic show an average per month between the United States and South America of 8,074 passengers.

Q. As opposed to the statement in your statistics of the [fol. 367] 7,126; is that correct?

A. That is correct.

Q. That would be a percentage of variation of roughly 10 per cent or so, wouldn't it?

A. That is correct.

Q. Again, let's use Exhibit 53 as an example, Mr. Mitchell. You compared there, as I understand it—

A. Excuse me. Did you say 53?

Q. Yes, GS53, traffic between the United States and Argentina.

A. Yes, sir.

Q. You compared there O.D. statistics for U.S. flag carriers, which showed true origin and destination, with I.N.S. statistics for foreign flag carriers, which do not

show true origin and destination necessarily; is that correct?

A. That is basically correct, yes, sir.

Q. Now, did you make any statistical studies to determine the exact extent of the variation caused by this comparison of I.N.S. statistics with O.D. survey statistics?

A. Yes, I have figures on that. They may not be right at my fingertips here. The O.D. survey figures are much [fol. 368] more reliable than the I.N.S. statistics. So therefore, I use them for the United States flag carriers, inasmuch as they show a more accurate reflection of the traffic actually moving to Argentina; whereas the foreign flag figures only show the passengers who flew on the same plane all the way to Argentina.

Q. Do they even show that, Mr. Mitchell, if the passenger made a stopover of several days before resuming his journey?

A. I said all the way, so it would not include stopover, no, sir.

Q. You mean he had to stay on that plane all the way down?

A. He had to—at least he was manifested on that plane all the way.

Q. Well, the result of comparing O.D. statistics for United States flag carriers with I.N.S. statistics for the foreign flag is to result in an over-statement, or to put it conversely, an under-statement of U.S. flag traffic between the United States and Argentina, isn't it?

A. Would you repeat that last about an under-statement? I didn't get that.

[fol. 369] Q. Of foreign flag traffic between the United States and Argentina?

A. You say foreign flag traffic is under-stated?

Q. That is—yes, that is my question to you.

A. It depends on what you mean by "traffic". Now, these O.D. survey figures do include some foreign traffic that moved between the United States and some segment of a trip of a passenger going all the way to Argentina. The comparison I was making here was to build up a total, U.S. and foreign flag total, against which Pan American and Panagra's position could be compared with the overall

total. You would not be including in that total all the passengers unless you counted those who had stopovers, and that is why I used the O.D. survey figures.

Q. For the U.S. flag traffic you used O.D.

A. And I also—

Q. So that you included stopover passengers?

A. And they also included stopover passengers, who used foreign flag carriers where they participated on part of their trip with U.S. flag carriers.

[fol. 370] Q. But comparing OD statistics for U. S. flag carriers with INS statistics for foreign flag carriers, you included stopover passengers in your U. S. carrier figures—

A. And also on foreign flag traffic, yes.

Q. And also some—

A. There is some foreign flag traffic in the U. S. flag carrier figures as explained in my statement—

Q. Yes, all right.

A. —at the beginning of my report.

Q. Let's take the person, then, who goes on Pan American from New York to Buenos Aires; he stops over at Port au Spain for a couple of days and at Rio for a couple of days before continuing his journey. He is included in your OD statistics in Exhibit 53 as a United States-Argentine passenger, is he not?

A. Yes, sir.

Q. Let's take the same passenger, but instead of having him go on Pan American he goes on Aerolineas Argentina, a foreign flag carrier, from New York to Buenos Aires. He stops off at Port au Spain for a couple of days and at Rio for several days before continuing his journey to [fol. 371] Buenos Aires. Is he included in your INS statistics—

A. He is included—

Q. —as a foreign flag traveler?

A. He is included in the OD survey figures if he took a U. S. flag airline for part of his trip.

Q. Please use my example. I had him on Aerolineas Argentine on the whole way down. And my question to you

is: Is he included in the INS statistics as a foreign flag passenger?

A. If he had a stopover, he is not.

Q. So, if he had gone Pan American, he would be included in the OD survey statistics, whereas if he took Aerolineas Argentina he is not included in the foreign flag statistics; is that correct?

A. No, sir. He is included in foreign flag if he participated with a U. S. flag carrier.

Q. Please use my example.

A. You should have said INS statistics.

Q. He was on Aerolineas Argentina the whole way down. Is he included in the INS statistics as a foreign flag passenger?

A. If he had a stopover?

Q. He had two stopovers, one at Port au Spain and one at Rio.

[fol. 372] A. He is not included in the INS statistics, no.

Q. Let's take the same passenger coming from Buenos Aires to New York, on Pan American first. He stops off at Montevideo, Rio and Jamaica before coming on to New York. He is included in your OD statistics as a Pan American passenger, isn't he?

A. Yes, sir.

Q. Take the same passenger, again coming north on, say, Aerolineas Argentina the whole way, making the same stopovers. Is he included in your INS figures as a foreign flag passenger?

A. No, sir, he is not.

Q. And you made some studies, you say, to determine the variation caused by this different reporting system between INS and OD survey statistics?

A. The only information I had—

Q. Did you make any studies, Mr. Mitchell? That's my question.

A. I discussed the problem with—

Q. Did you make any studies, Mr. Mitchell? Please answer my question.

A. What do you mean by "study"?

Q. Did you make any statistical or economical studies [fol. 373] by yourself or with people working under your

supervision to determine the variation in the statistics caused by this different reporting method?

A. No study could be made because I know of no information that would provide the basis for making such a study. I used what was available.

Q. That answers my question, Mr. Mitchell. I wish you would just respond and not go beyond it.

Then my question to you, Mr. Mitchell, is: Do you know the exact percentage variation that is caused by this different reporting method between OD statistics and INS statistics?

A. Yes, I think I can show you the effect of the two.

Q. Good. Between the United States and Argentina.

A. I am sorry, I don't have that readily available, but I can show you what the difference is—

Q. That's all right. You have answered the question.

A. —for U. S. flag to South America.

Q. I think those statistics will be in the record, Mr. Mitchell.

Again take Exhibit 53 as an example, Mr. Mitchell. [fol. 374] Would you tell us again what you mean by PAA participation?

A. It means that Pan American carried these passengers on the entire trip between the United States and, in this case, Argentina or carried the passenger part of the way on that trip, as reported in the OD survey.

Q. Then, if the passenger took Pan American from, say, Buenos Aires to Montevideo, a distance of about 125 miles, and took Varig, a Brazilian carrier, the rest of the way to New York, the passenger would be included in the Pan American statistics as an Argentine-United States passenger on Pan American; is that correct?

A. With Pan American participation.

Q. If the same passenger flew on Varig from Buenos Aires to Montevideo and then took Pan American the rest of the way to New York, would he be included in your statistics as a—

A. Would you repeat the points? I was a little confused on that.

Q. All right. Take the same passenger flying on Varig from Buenos Aires to Montevideo and then taking Pan

American the rest of the way to New York. First my question [fol. 375] is: Would he be included in your statistics as a Pan American passenger from Buenos Aires to New York?

A. Yes, sir.

Q. And my next question is: Would he be included as a foreign flag passenger from Buenos Aires to New York?

A. Would you repeat the legs of that trip so I can answer your question correctly?

Q. All right. He is on Varig from Buenos Aires to Montevideo.

A. Yes.

Q. Then he took Pan American the rest of the way to New York. You have answered that he would be included in the Pan American statistics as a passenger from Buenos Aires to New York even though he got on the Pan American plane at Montevideo.

A. In the OD survey series, yes.

Q. Now my question to you is: Is he also included in your foreign flag statistics as a Buenos Aires-New York passenger on Varig or on a foreign airline?

A. Not on that particular trip, no, sir.

Q. So that again makes for some discrepancy in your [fol. 376] figures, doesn't it?

A. There are minor differences. You would have to count those passengers to see how important they are.

Q. What tests have you made to determine the extent of the inaccuracy caused by this method of counting PAA participation and not foreign flag participation?

A. I have a little table here which explains what the effect is, and I would like very much to give you the result.

Q. All right. I would like to hear the result for United States or Argentine traffic.

A. I don't have it for the individual—

Q. All right.

A. I can show it to you for certain other—

Q. All right. You have answered my question.

A. I can work that up.

Q. You testified, Mr. Mitchell, I believe, that Pan American is the largest international air carrier in the world by any measure; is that correct?

A. I don't think I quite said that. Can you recall the page where I said that?

[fol. 377] Q. No. You don't know whether it is or not. I take it, by any measure.

A. In terms of route miles—

Q. Just please answer my question.

A. Well, I thought I was. I am sorry.

Q. I say by any measure do you know? Let me rephrase that. Do you know whether Pan American is the largest carrier in the world, using any measure?

A. I don't think it is.

Q. All right. Indeed, it is not even the largest United States carrier that engages in international air transportation, is it, Mr. Mitchell?

A. In international operations I believe that it is.

Q. Did you make any studies as to how large Eastern, TWA, United or American are?

A. In their international operations?

Q. No. How large they are.

A. I know how large they are, yes.

Q. Considerably larger than Pan American, aren't they?

A. Not in international operations, no, sir.

Q. They are considerably larger than Pan American, [fol. 378] aren't they?

A. Including their domestic operations, yes.

Q. And they do engage in international air traffic, don't they?

A. To some extent; not to the extent that Pan American does.

Q. Pan American doesn't engage in domestic transportation, does it?

A. That is right. I believe that is correct, yes, sir.

Q. You testified at page 40 of your testimony, Mr. Mitchell, that the great bulk of international traffic is on one plane for the entire international route; is that correct?

A. I did not say the same plane there. I said the same airline or I implied the same airline, not the same plane.

Q. Same airline. All right. I will take that correction.

A. That makes a big difference in the statistics.

Q. Did you make any test to determine the difference?

A. Yes, sir.

[fol. 379] Q. As to whether it was the same plane or the same airline?

A. Same airline.

Q. Take again your Exhibit 53, United States-Argentina. Did you make any tests or studies to determine the exact percentage of traffic which flies on the same carrier on that entire international flight?

Mr. Kenney: I am sorry. May I have that exhibit number?

Mr. Mallory: 53.

A. Yes, sir, I did. I did with respect to the month of September.

Q. The month of September?

A. Yes, sir.

Q. Of what year?

A. 1957.

Q. What was that percentage?

A. Would you just wait a moment, please?

Q. Oh, yes.

A. You were referring to U. S.-Argentina traffic?

Q. Yes, I am.

A. This is almost the same, Mr. Mallory. It is based [fol. 380] on the OD survey of the CAB, and it is between the United States and Buenos Aires. Will you accept that?

Q. I will take it.

A. Pan American did not participate with any other international air carrier in carrying about 60 per cent of that traffic. Now another 6 per cent approximately was carried by Panagra with another U. S. airline but with no foreign carrier. Another 4 per cent was carried with another U. S. airline and with a foreign flag airline. Pan American participated with a foreign airline but no other U. S. airline in carrying about 31 per cent of the traffic.

Q. Weren't there CAB studies, Mr. Mitchell, that show that approximately 25 per cent of the passengers fly on more than one carrier on a voyage between the United States and Argentina?

A. I don't know what studies you are referring to.

Q. You did not examine any studies?

A. I may have, but I don't know which one you are referring to.

Q. I am just asking you if there are any studies of the CAB which would show that.

[fol. 380a] A. I couldn't answer that.

Mr. Mallory: All right. That completes my cross.

[fol. 381] Q. Mr. Mitchell, on your direct testimony you were asked the following questions and gave the following answers:—

A. Would you give the page, please?

Q. 69:

"Q. Panagra just started its cargo service in 1957?

"A. That is right.

"Q. In July.

"A. These figures are for 1957, and Grace only started its all cargo operation in the middle of that year."

Are you not aware of the fact, Mr. Mitchell, that Panagra started cargo operations in 1948?

A. Oh, yes, sir, but they suspended them after that.

Q. Do you know why they suspended them, Mr. Mitchell?

A. (No response)

Q. Yes or no, Mr. Mitchell?

A. No; in detail, I don't.

Q. Are you familiar with the decision of the Civil Aeronautics Board, where they found that all cargo operation by Panagra was not reasonably required?

[fol. 382] A. I have seen that statement, yes, sir.

Mr. McKay: That is all.

Cross Examination.

By Mr. Kiernan:

Q. Mr. Mitchell, will you turn to your Exhibit GS2 for a moment, please?

A. Yes, that is the map.

Q. That is the map. And in that map you have defined western South America as a portion of Colombia, Ecuador, Peru, Bolivia, Chile; and is that a portion of the Argentine,

or does that include the whole of the Argentine, your definition of western South America?

A. It includes all of Argentina, actually, but there is practically no traffic between the United States and Argentina, other than to book Buenos Aires. So for practical purposes, whether it is in or out makes no difference. However, Panagra is certificated to fly into points in Argentina other than Buenos Aires.

Q. Well, for purposes of this map, as I understand it, you have taken as your definition of western South America only that portion of South America served by Panagra?

A. It is the area of effective competition in which Panagra operates.

[fol. 383] Q. You have excluded in your definition of western South America those portions of South America which are served by Braniff, but which are not served by Panagra; is that correct?

A. To the right of this line that divides western South America from eastern South America, that is correct. Within western South America I included all points where they are served by Braniff, Panagra or anybody else.

Q. Well, the test of that was laid down by you in arriving at your definition of western South America, as indicated on your Exhibit GS2, was whether or not the area was served by Panagra; isn't that so?

A. I don't believe that is stated in this exhibit.

Q. No, but I am talking about what the result of your exhibit is.

A. The result of my exhibit is the area of effective competition in which the defendant Panagra operates.

Q. So that anything, any area of South America, which is served by one of its competitors, namely, Braniff, which is not also served by Panagra, has been excluded by you from—

A. It hasn't been excluded if it is within this western [fol. 384] South America, the geographic area that I have set up here.

Q. I think we are arguing around the corner.

A. Why don't you make a specific example and I can say yes or no?

Q. What I am trying to bring out is, the theory upon which you constructed this map, so as to define western South America, is to take only those areas which are served by Panagra and not all of the areas served by Braniff?

A. That is quite true. And with respect to anywhere that Braniff serves, you mean?

Q. That's right.

A. That is correct, yes.

Q. And, thereby you have excluded Bogota and Colombia from western South America.

A. Yes, sir.

Q. And you have also excluded Paraguay.

A. Yes, sir.

Q. And Uruguay.

A. Yes, sir.

Q. Now turn to Exhibit 10, will you, please? You notice there that you arrive at a percentage total of Pan America [fol. 385] Panagra under average per month percentage of total, and isn't the figure 84.2 there?

A. Pan America and Panagra combined, yes, sir.

Q. Now do you notice the figure, Panagra participation, 79.6 per cent?

A. Yes, sir.

Q. Do you know to what extent that percentage figure would be varied if you included all of Braniff's competition in South America?

A. Yes, I think I do. I assume you are referring to the areas in which—

Q. No, I am asking you whether if you included all of the passengers carried by Braniff into South America?

A. Well, I don't have information for Braniff separately, sir, but I do have information how much was carried between the United States and the different countries of South America by these categories of carriers that I have listed in the exhibit.

Q. You don't have the information then that I have asked you about, to what extent that percentage, 79.6, would vary if all of the passengers carried by Braniff into South America were included in your computations?

[fol. 386] A. I don't have figures for Braniff, no, sir.

By Mr. Kenney:

Q. Mr. Mitchell, will you turn to page 31 of your testimony?

A. Yes.

Q. And will you explain what you meant when you said that the figures referred to therein were not completely satisfactory?

A. Well, Mr. Kenney, I only had a limited time in which to compile these statistics for this trial. Up until late in January there was talk about settling this case. I was not authorized by the antitrust division to bring any of these statistics up to date until his Honor made a ruling on that settlement matter and set a trial date for May 4th.

Between that time and May 4th is a very short length of time in which to put together figures covering a period of four or five years. I could only use the available sources. I did not have the time. I could not, even with the financial resources, go into an exhaustive study to get exact statistics like I would like to have had them for preparation, for presentation at this trial.

I used, therefore, just what was available, recognizing [fol. 388] that some statistics are compiled in different ways by different agencies. Some agencies collected information on U.S. flag participation, while other agencies collected information on foreign traffic, but in a different way.

I think that all I could under the circumstances, unless we wanted to delay the trial, was to present what was available, explaining how it was compiled, and let the results speak for themselves.

Q. Do you feel that your statistics are accurate?

A. The basic statistics I used are accurate.

Q. Now you have referred to INS and OD statistics; could you explain what they are?

The Court: Well, hasn't he?

Mr. Kenney: Well, I think he does in his exhibit, your Honor.

The Court: Yes, I thought so.

Q. Do you feel that the OD statistics are the more accurate of the two, Mr. Mitchell?

A. Oh, very definitely. Anyone recognizes that.

Q. Have you had occasion to examine any of the defendants' statistical exhibits?

A. Yes, I have, some of them.

Q. Do you know whether they also use INS figures?

[fol. 389] A. Oh, yes, they do. In fact, they use INS statistics for U.S. flag as well as foreign flag. I used the better figures for U.S. flag. I used the OD survey figures.

Q. And they used the INS figures for both?

A. In some exhibits I have seen they used them for both, yes.

Q. Now, why did you use the figures of March and September in your calculation, Mr. Mitchell?

A. Those were the only months which were reported in the OD survey of the CAB. There is no other period covered except those two months.

Q. And have you supplied statistics for the total 12-month traffic in certain years between United States and South America?

A. What type of statistics, Mr. Kenney?

Q. Well, you used the March and September; did you also prepare total figures for the years 1957, '56, '55, and so on?

A. Yes, I did do that on a yearly basis, using the Immigration and Naturalization statistics, but I could not use it from the OD survey.

Q. Now, could you tell us, Mr. Mitchell, if you can, what the difference is between U.S. flag to South America when [fol. 390] you used OD figures and INS figures?

A. For the year 1957, by my Exhibit 32, it shows that Pan American—excuse me. Were you referring to U.S. flag or Pan American-Panagra's participation in the total traffic?

Q. Pan American-Panagra's participation?

A. My Exhibit 32 shows that Pan American-Panagra carried 47 per cent, that is, participated in 47 per cent of the U.S. and foreign flag traffic.

Now, if you use strictly March and September for the INS, rather than for the whole year, and you use the CAB

for March and September you will get a Pan American-Panagra participation of 45 per cent, or roughly 2 percentage points less.

Q. A slight difference; is that right, sir?

A. A slight difference.

Q. Now, Mr. Mitchell—

A. (Continuing) But if you were to use the Immigration and Naturalization figures for U.S. flag for the year and divided that by 12, and then you compared Pan American and Panagra, as reported by the CAB in the two months, divided by 2, in other words, putting all the figures on a monthly basis, Pan American-Panagra participated in car-[fol. 391] rying 51.7 per cent of the total.

Q. So—

A. (Continuing) However, the series are not completely comparable, and I didn't feel that I was justified in using U.S. flag totals from one source, and another source for CAB. So I think I was a little conservative when I reduced the figures to 47 per cent, using the OD survey exclusively for U.S. flag.

Q. In one instance it is a little below, and in one instance a little above your figures.

A. Above, and I used the in between figures.

Q. Mr. Mitchell, do you know whether the Civil Aeronautics Board uses March and September as representative months?

A. They were established many, many years ago, and were, according to information that I received from people that are there now, that they were generally conceded to be representative months. I could not actually put my finger on the man that selected those two months. I think perhaps the airlines themselves had something to do with it. But I do know that counsel for Pan American has stated to antitrust officials that they are considered to be representative, so that—at least that was done in a conference one time in the antitrust offices in Washington, a few years back, by counsel for Pan American.

[fol. 403] R. G. FERGUSON, called as a witness by defendant Pan American World Airways, Inc., being first duly sworn, testified as follows:

Direct examination.

By Mr. Peck:

Q. Mr. Ferguson, by what company are you employed?

A. Pan American World Airways, Inc.

Q. And what is your position with that company?

A. I am the treasurer of the company.

Q. How long have you held that position?

A. Since 1949.

Q. Did you have experience with the company prior to that year?

A. Yes. I actually joined the company in 1929.

[fol. 404] Q. And would you tell us, please, the work you have done and the positions you have held since 1929?

A. From 1942 until 1949 I served as the assistant treasurer of Pan American. Prior to that I served as the division accountant of our trans-Atlantic division, and prior to that served in financial and accounting matters in Brownsville, Texas for a period of about three and a half years during the early days of Pan American's operation through Mexico and Central America.

Q. How long have you been stationed here in New York in the general offices?

A. About 18 years.

Q. What do your duties encompass?

A. I am responsible for fiscal management, including banking and corporate finance, preparation of budgets and economic studies, preparation of economic and financial data, traffic data in connection with CAB proceedings, economic material and cost material having to do with the making of rates, both CAB-wise and in so far as IATA determination of commercial rates are concerned, and financial and fiscal forecasts in connection with contracts and the negotiation of contracts.

Q. You might tell us what the IATA is, Mr. Ferguson.

A. The IATA is an international air transport association which has to do with regulation of international air-

riers. One of its primary functions being the determination of rates by conferences, somewhat similar to steamship rate conferences.

Q. Are you called upon frequently to prepare and support estimates of traffic markets, the distribution of traffic between the carriers and estimated financial results?

A. Yes, particularly for the CAB in both rate cases and route cases covering applications for new routes. My department is saddled with the responsibility for preparing and presenting such cases before the Civil Aeronautics Board, and I believe we probably prepared some 40 cases in the last 18 years, possibly more, having to do with economic phases of air transportation.

Q. Have you appeared as an expert witness in such matters?

A. Yes, I have.

[fol. 406] Q. Now, did your preparation of the data and your testimony include the proceeding known as Docket 779, which was the 1943 investigation of Panagra's routes?

A. Yes, sir.

Q. By the CAB?

A. It did.

Q. Did it likewise include Docket 325, in which Braniff was certified in Latin America?

A. That is correct.

Mr. Peck: Certificated, I should say, not certified.

Q. Did you assist, Mr. Ferguson, in the preparation and negotiation of the 1946 through flight agreement between Pan American and Panagra?

A. Yes, I did, particularly with regard to the various financial provisions of the agreement, distribution of advertising costs, compensation for use of aircraft and ground facilities, and maintenance work which we were to do for Panagra. This also entailed the determination of investment on which Panagra would be paid a return.

Q. In your connection with your preparation of budgets and forecasts and your presentations to the CAB and the [fol. 407] IATA contract negotiations, do you maintain familiarity with the company's policies and procedures re-

specting such matters as contracts of sales procedures and other operations?

A. I do. I try to keep up with them.

Q. Now, I hand you this group of exhibits under one binder, PS for Pan American statistical Exhibits 1 through 23, and ask you if these exhibits were prepared by you or under your direct supervision?

A. They were.

Q. And do they correctly reflect the material which is included in them?

A. I think they are true and correct.

Mr. Peck: Would you please mark them in evidence? You need not do it now, as I understand, but you can do it later.

If your Honor please, may I hand you a set?

Counsel for the Government and for the other defendants have a set.

Mr. McKay: Your Honor, may we have the same understanding as with the Government exhibits this morning?

The Court: Yes.

Mr. McKay: Thank you.

[fol. 408] By Mr. Peck:

Q. Mr. Ferguson, would you describe generally the relationship with the Pan American and Panagra route structures in Latin America?

A. Yes. I think it might be well to refer to our Exhibit No. PA22, which is in the binder of exhibits, which shows a map of the Pan American routes and the Panagra routes. I have a large chart here, which was the chart from which the exhibit has been made.

As you will see from the chart—

Mr. Kenney: Would you please talk louder, sir?

The Witness: I will try.

A. (Continuing) As you will see from the chart, the Pan American routes are primarily east coast routes and the Panagra routes are west coast routes, both winding up at Buenos Aires. These routes and also at Canal Zone or Panama City.

Other routes of Pan American serve other areas of Latin America, including the Caribbean, Central America, Mexico, et cetera.

If you will look at the map you will find no duplication of route at all. On the contrary, the two routes actually [fol. 409] feed each other with traffic, providing a single integrated service.

Q. Would you give us some fuller picture of the feeding of one system and the other?

A. Yes. Pan American's routes, looking at the north coast of South America and the area north of that, feed traffic to Panagra at the Canal Zone, and this comes from several directions. The most important route is the Miami-Canal Zone sector, which feeds traffic from the northern part of the United States through Miami to the Canal Zone. This operation closely integrates the Pan America and Panagra operations.

In addition to that, you will find service from New Orleans down through Central America through the Canal Zone. You will also find service from Houston through Mexico City, and you will find service from San Francisco and Los Angeles, all coming into the central point, Panama City, and providing traffic at that point for the west coast of South America.

In addition, the route across the north coast provides service from Caracas, Curaçao, Maracaibo, Barranquilla and Kingston, and even the Kingston-Barranquilla service is a collection point from which passengers can get from the island between Cuba and Puerto Rico into the Panama [fol. 410] City connecting point.

We have made a check of the amount of this traffic which flows into Panama City and connects with Panagra, and from these areas, including Central America and Mexico, we have found that there are about 4,000 passengers delivered by Pan American to Panagra at that point.

Q. That is described as the feeding of Pan American to Panagra, and I take it the reverse is true, that Panagra feeds into Pan American traffic to be dispersed to the points—

A. Yes, the interchange, the interchange actually is twice that, or approximately twice that. We have taken both directions and it is approximately twice.

Q. How would you describe the services of the two carriers to Buenos Aires?

A. Well, it is an east coast service for Pan American and a west coast service for Panagra.

Q. Does that mean that the two carriers compete for that Buenos Aires traffic?

A. Well, I would say only to a minor extent.

Q. Why do you say only to a minor extent, Mr. Ferguson? [fol. 411] A. Well, first let's take Latin America as such. It is no competition for Buenos Aires traffic to points in Latin America as such. For example, Panagra cannot compete for traffic from Buenos Aires to Rio or Belém, Porto Spain, spots like that. Nor can Pan American compete for traffic from Buenos Aires to Lima or Santiago or Guayaquil, they are just not competitive.

The traffic from and to Buenos Aires of this nature amounts to 62 per cent of the total traffic carried by American carriers in and out of Buenos Aires.

Q. To make that perfectly clear, you mean that 62 per cent of the traffic carried by the two carriers to and from Buenos Aires originates, on the one hand, or has destination on the other, in some place in Latin America, not touching the United States?

A. That is correct. That is on American carriers.

Q. Yes. As to which routes there are no common points of call, just the terminal at Buenos Aires.

A. That is correct.

Q. Now, the 4,000 passengers a year that you were speaking about being interchanged, is that just Latin American traffic now, or do you include in that your 4,000 traffic [fol. 412] between South America and the United States?

A. The 4,000 passengers are the passengers from the United States, points such as San Francisco, Los Angeles, from Houston, from New Orleans.

Q. Well, pardon me. Let's see that we understand each other, and we may have some misunderstanding, I don't know, but let's get it clear in any event. You mentioned 4,000 passengers exchanged each year, 4,000 moving south, 4,000 moving north, at the Canal, between Pan American and Panagra. I confess that my impression had been—correct me if I am wrong—that that 4,000 was just Latin American passengers, in other words, passengers coming

from some place in Latin America, moving into South America, or coming from South America and moving some place in Latin America, and my impression was that the 4,000 did not include passengers either to or from the United States. Now correct me if I am wrong.

A. You are wrong. This includes passengers which would not be over the Miami-Balboa route, but would have come from New Orleans, from Los Angeles, San Francisco.

Q. Now, before that step backwards to understand that [fol. 413] figure, you had stated that 62 per cent of all the traffic of the two carriers in South America either originated in or was destined to some point in Latin America; right?

A. That is correct.

Q. What about traffic between the United States and Buenos Aires? Do the two carriers compete for that traffic?

A. Only, again, to very slight extent.

Q. Well, now, why do you say that, Mr. Ferguson?

A. Well, there are two reasons. First and foremost important is that passengers select their routings primarily to cover their stopover desires. The second reason is that for all areas other than, let's say, the northeastern area of the United States, the west coast route to BA is appreciably shorter than the east coast route, and—

Q. Well, now, let's break—well, go ahead. Pardon me.

A. (Continuing) And would naturally draw the traffic which is indifferent to routing, and the principal interest is in the best service from the standpoint of time.

Q. Let's break those two considerations down and explain [fol. 414] them each a little more fully. Explain for us, please, how the stopover requirements or wishes of a passenger determine his selection of route in most cases?

Mr. Kenney: I have to object to that question, your Honor. That is calling for a statement from this witness as to what is in the passenger's mind. I don't think he is qualified to answer it.

The Court: I will allow it.

You may tell us.

Q. Go ahead.

A. Well, I think it is perfectly clear that very few people make trips of almost 6,500 miles between the United States

and Buenos Aires for the sole purpose of purely visiting Buenos Aires and returning. They're interested also in the major cities in Latin America, such as Rio and San Paola, on the east coast, and Lima, B.A. Quito—Lima, Santiago, Quito, on the west coast. Hence the routing in effect governs the coast and the stopovers govern the coast which the passenger uses.

This is apparent if we consider the various types of travel—

Q. Yes, I was going to ask you to do that.

A. —which are involved here. We know that almost 50 [fol. 415] per cent of the traffic to and from South America is for business purposes. There are few business men who would make a trip just to BA and return and spend about a thousand dollars on a ticket and three days' traveling time purely to do business in BA, unless there was some very urgent matter involved. Most U.S. firms who have traveling representatives in Latin America have offices in the various major cities on the east coast and west coast, or they have affiliates or dealers or some concern with which they have to do business.

A banker, for example, who is making a trip around South America probably has correspondents in most of these cities, and he will want to make his call on these correspondents in all cities, not just in BA.

Consequently, the business man seeks to make the maximum out of his trip and plans his routing accordingly.

Q. What about the people who are bent on pleasure?

A. In the case of the vacationer, there is no reason in the world why he would want to take a trip to BA when he could make stops at Rio, San Paola, Lima, Santiago, without any additional cost whatsoever.

Q. Well, do you know from your experience and observation [fol. 416] that that is exactly what they do, make stopovers?

A. We certainly do. We have estimated that the round South America passengers account for some 53 per cent of the United States-BA traffic. This was in 1958.

Q. What do you mean by "round South American traffic"?

A. Well, I mean they go down the east coast and make

their stops in various cities on the east coast and return via the west coast, making stops in Santiago, Lima and the various resort areas on the west coast.

Q. That is 53 per cent of the passengers, you say, that are going to BA from the United States make the circular tour?

A. That is correct.

Q. Do the two carriers, Panagra and Pan American, make a joint effort to get them to make that grand tour?

A. Oh, very definitely. We spend substantial sums of money in advertising and developing and promoting the around South America services.

Q. Is that a sizable proportion of the joint advertising? [fol. 417] A. Yes, it definitely is.

Q. Do you have some of that advertising?

A. We have included in our exhibits, in Exhibit PA23—

Q. That is the last one in this group?

A. It is the last one in the book—some samples of advertising. The last one in the book actually is a sample of the round South America advertising.

Q. Do you have some others with you?

A. Yes, we do. We have some color exhibits.

Q. I would like to see them. And is the material in this folder typical advertising material in magazines, newspapers and folders covering—

A. Yes, they are.

Q. —round South America tour?

A. Round South America. It is done in two ways. There are tour folders which we have used, and also national advertising in magazines, which are paid for jointly by Pan American and Panagra.

[fol. 418] Q. I understand that you are short of these and you don't want these marked in evidence? Is that right?

A. That's correct. We can have them reproduced if it is necessary.

Q. Well, I would just like to leave the Court see them.

The Court: Don't you think the Government should have one look?

Mr. Peck: I am sure that the Government is familiar with it, but we will give them a look but not a ticket.

There is no objection to the Court having a look.

It might whet your Honor's appetite. It whets mine. I must say.

The Court: I don't know what I am going to do about mine, though.

Q. And these folders are typical?

A. They are.

Q. I believe that covers, Mr. Ferguson, the bulk of the traffic which you said is not competitive. Now would you—

The Court: May I interrupt a minute, Judge?
[fol. 419] Mr. Peck: Yes.

By the Court:

Q. You said that you estimate that 53 per cent of the passengers take this sort of round trip on both coasts?

A. Yes.

Q. That is almost very close to saying that 50 per cent go down one coast and come back the same coast?

A. Well—

Q. Isn't it?

A. No, I wouldn't say that is quite true.

Q. Well, it says in effect that 47 per cent of the people don't take the round trip.

A. Yes. That is correct. However, within that 47 per cent are those that, due to requirements for their stopovers, will use one coast or the other coming back to the stop-over desires of the passenger.

Q. And what is the basis that you use to determine whether a person is traveling on business or pleasure?

A. We have used the survey which has been made by the [fol. 420] Port of New York Authority on traffic to South America going through the Port Authority's airports.

Q. Maybe I didn't make myself clear. You said that 50 some-odd per cent of the passengers—in trying to break down why they went one way as distinguished from another, you said that 50 per cent are business people.

A. Yes.

Q. And I was curious as to how you determined who was traveling for business and who was traveling for pleasure.

A. We did not make a survey ourselves. We used what

the Port of New York Authority—their survey, to determine that:

Q. They found out by their survey who was traveling for business and who for pleasure?

A. That's correct.

The Court: All right. Fine.

By Mr. Peck:

Q. Let us move now, Mr. Ferguson, to the second important consideration which you said would determine routing, and that is the relative distances and time required to go one route or the other to Buenos Aires. Would you explain that, please?

[fol. 421] A. Yes. It is a fundamental fact of geography that the South American continent lies entirely east of the North American continent. Hence the shortest route from the United States, from most points in the United States, between the United States and B.A. is down the West Coast, and this is exemplified by the fact that New York, the Canal Zone and Lima lie on a straight north-south line. The East Coast of South America, if used, would mean a substantial detour around the South American continent, and the further west or south the origin of the passenger within the United States, the greater the detour would become by using the East Coast.

Q. Can you give us some figures, for example, as to how much longer it would be down the East Coast route from San Francisco and Los Angeles?

A. From San Francisco and Los Angeles the passenger would save almost 1300 miles by using the West Coast routing as compared to the East Coast routing to B.A.

Q. Supposing he was going from Chicago or Miami?

A. Well, from Chicago or Miami via the East Coast would be something over 900 miles longer than the use of [fol. 422] the West Coast.

Q. When you move into the Northeast part of the United States, what is the differential there?

A. The mileages become much more comparable at that point. For example, New York-B.A. mileage via the East Coast is 6,267 miles, and via the West Coast it is 5,728 miles.

Q. Then what is the difference in traveling time from New York to Buenos Aires by the two routes?

A. My Exhibit No. 17 indicates that for current services the time New York-B.A. via the West Coast is 22 hours and 45 minutes and via the East Coast 25 hours and 20 minutes.

Q. And I presume that as you move west the time difference would preponderate substantially in favor of the quicker West Coast route; is that right?

A. I think that's correct.

Q. Can you give us any statistics from the Civil Aeronautics Board as to the origin and destination of passengers traveling between the United States and South America in relation to the Western part of the United States and the Eastern part?

A. Yes. We made some studies with regard to how these [fol. 423] people travel, and if you take San Francisco and Los Angeles, 60 per cent of the U. S. or the San Francisco, Los Angeles-B.A. traffic uses the West Coast of South America, and 40 per cent the East Coast.

On Chicago the distribution is about 63 per cent West Coast and about 37 per cent East Coast.

Q. How about Miami?

A. On Miami it is about 67 per cent West Coast and 33 per cent East.

Q. When you are in the Northeast part of the United States how does the traffic divide between the East and West Coast routes?

A. It divides approximately equally. Our figures, based on September of '57 and March, '58 indicate that 49.4 per cent use the West Coast and 50.6 per cent use the East Coast.

Q. In view of the great distance and time advantage of the West Coast route from all areas of the United States other than the Northeast, how do you account for the fact that according to the statistics you have just given us about 40 per cent of the United States traffic from these other areas of the United States elects to use the East Coast route?

[fol. 424] A. That percentage in my opinion represents what I have been explaining before, the portion of the

traffic choosing to use the East Coast despite the greater distance entirely or primarily for stopover reasons. In other words, there is no reason for this traffic to use the East Coast except for this purpose.

It seems logical to conclude that if 40 per cent of passengers elect to use the East Coast for stopover purposes, at least an equal percentage would choose the West Coast for the same reason. So it seems to us that about 80 per cent of the U.S.-B.A. passengers select one Coast or the other for the stopover reason.

Q. Then as to the remaining 20 per cent, what is your opinion as to the extent of the competition between the two carriers for that 20 per cent of the traffic from the United States?

A. Well, I have concluded that the remaining 20 per cent consist of passengers who for family reasons or government travel or assignment desire the fastest possible service between U. S. and B.A.

Q. Then how does that 20 per cent travel, according to the figures here, from the United States other than from [fol. 425] the Northeast?

A. Well, I think that it is influenced or can be influenced to use the East Coast or the West Coast routes depending on which route provides the best service, the best departure times as far as his plans are concerned, the availability of space on the airplane when he wishes to travel, and the type of accommodations which he may desire, such as tourist or first-class service.

Q. Now are you talking in that respect just about the Northeast part of the United States?

A. No. I am talking about the entire U. S.

Q. Well, if I have understood you correctly the time factor preponderates so definitely in favor of the West Coast route for any passenger coming from the United States other than from the Northeast that, regarding the passengers who you are now classifying as being bent on getting there and back as quickly and directly as possible, I am asking you whether that 20 per cent then, which you estimate is the percentage of such passengers, wouldn't travel the West Coast route from all parts of the United States other than the Northeast part of the United States.

A. I think that is correct.

[fol. 426] Q. Then let me ask you this: Whether as to that 20 per cent you regard the two carriers as being in competition for areas of the United States other than the Northeast.

A. May I have the question, please?

(Question read.)

A. No, I think that they are not competitive in the areas other than the Northeast, in effect.

Q. Then you come down to what proportion of the traffic do you say that they are competitive for, that 20 per cent from the Northeast?

A. Twenty per cent of the Northeast. The Northeast accounts for 54 per cent of the total U.S.-B.A. traffic, and 20 per cent of 54 per cent would amount to about 10.8 per cent of the total U.S.-B.A. traffic.

Q. And what would be, on that basis, the maximum percentage of Panagra's total traffic that could be deemed to be competitive with Pan American?

A. My analysis would indicate about 2 per cent of Panagra's total passenger miles as being competitive.

Q. Explain that for us, would you please?

A. Yes. In the year ended June 30, 1958, Panagra delivered 16,442,000 passenger miles from the Northeastern portion of the United States between the U.S. and Buenos Aires. We have previously indicated that only 20 per cent—

Q. What is that figure, please?

A. That is the passenger mileage on—

Q. From—

A. —on U. S.-Buenos Aires traffic from the Northeast area.

Q. And that figure is what?

A. 16,442,000 passenger miles.

Q. Yes. Now go ahead, please.

A. We previously established that only 20 per cent of this traffic is competitive or 3,288,000 passenger miles. This compares with Panagra's system passenger mileage for the year ending June 30, 1958, of 162,013,000 passenger miles or 2 per cent.

Q. Tell us, please, Mr. Ferguson, what are Pan American's policies with respect to selling the two services down the East Coast and down the West Coast?

A. Well, our primary policy is to sell the service which the passenger wants. If the passenger desires the shortest [fol. 428] service or a stopover on one coast or the other, and comparable services are available, we quote both and let the passenger make his choice. There are a few passengers who fail, however, to express their desires.

Q. Does Panagra have its own independent means of acquainting the public with its services?

A. Yes, indeed. Panagra has its own advertising and publicity. Exhibit PA-19 would indicate that Panagra spends about 8 per cent of its passenger and cargo revenues for this purpose. These are substantially higher percentages than Braniff and Delta spend in selling their Latin-American services.

Pan American spends about a little less than 4½ per cent of these revenues for its Latin-American services. Panagra has a sales staff in the U. S. which contacts the Pan American offices as well as travel agents.

I think that the two groups, Pan American's district sales offices and the Panagra staff who are doing selling, cooperate very fully in their work with the agents and generally they go to call on agents as a team. However, Panagra on the other hand is perfectly free to call on agents as it will.

[fol. 429] Q. And does?

A. And does.

Q. Now we will come to a different subject, Mr. Ferguson. Paragraph 18 of the complaint in this action is addressed to the sphere of operations of Pan American and Panagra, Panagra operating on the West Coast of South America and Pan American operating on the East Coast of South America and from Miami to the Canal without duplicating services between them.

Would you please tell us what would have been the economics of duplicating services between Pan American and Panagra for these various areas over the period from 1928 to 1946?

A. Yes. First I think that we should recognize the con-

dition of development of airline operation in this early period, and I might say that that was in the early period of my connection with Pan American in the Latin-American area.

It is unrealistic to think of airline operations as we know them today at that period. We were confronted with—

Q. What period are you discussing now?

A. The period from beginning through 1938.

[fol. 430] Q. All right.

A. The equipment which was available to operate the routes was slow, short range, high cost, and had very little carrying capacity. The airports and airways which were put in were the result of a gradual development by the airlines as opposed to having these things made available to them by governments, et cetera, and were done as the developments came about and as there were funds available to put them in.

There were no established markets at that time, as you might say, with a large potential of passengers and cargo as we know traffic markets today. If we are speaking about the first decade of Latin-American operations, we just can't speak of them as just normal commercial enterprises. The economics of the situation are about what one would imagine under these conditions.

Q. Would you give us some detail, then, as to the economics of competition during that decade and then move on thereafter up to 1946?

A. Yes. I think a number of the exhibits which I have in the binder will demonstrate the type of operation which was prevalent at that time.

[fol. 431] Q. All right. As you go ahead and give us this economic picture, Mr. Ferguson, refer us as you go along to the exhibits which demonstrate your observations.

A. Well, let's refer to PS-5.

Q. Yes.

A. PS-5 indicates the frequency of operation which Panagra was able to maintain through the period we are now discussing. In the period up through 1939 frequency of operation over the Balboa-B.A. route never got higher than two frequencies a week, and that was effective from 1930 through 1939. The aircraft which were available in

the early years, some part of them were single-engine. We finally developed to the tri-motor and the Sikorsky S-38, which was an eight-passenger plane amphibian which was used where no airports were available down the West Coast. The DC-2, which was a forerunner of the DC-3, which was a 12-passenger airplane as I remember it, came in in '35, and we finally got up to the DC-3, which was the work horse of the last war, in 1937.

So that the operation on that route during that period was pretty thin.

[fol. 432] If you look a little further down, we never got to daily service, and again with DC-3s in 1943 Exhibit PS-7 shows passenger loads which were available for carriage during this period.

Q. Now you are talking, I take it, at least I want to break this up, Mr. Ferguson—let's talk about the West Coast and then talk about the East Coast and then talk about the Balboa—the Miami-Balboa segment, and I take it what you are discussing now are the economies of competition during this period on the West Coast of South America; is that right?

A. That's correct.

Q. All right. And you have talked about then—PS Exhibit 5, what was the Pan American part of that West Coast service, is that right, which was Miami-Balboa?

A. That's correct.

Q. All right. Now you are going to move over to the Panagra part of it?

A. PS-5—

Q. Which is PS-7?

A. —is Balboa to B.A. which is the Panagra route.

Q. Yes.

[fol. 433] A. Now PS-7 is also the Panagra route.

Q. Pardon me, yes.

A. From Balboa to B.A.

Q. Yes, right, right.

A. And this indicates the average passenger load per airplane mile during the period 1929 through 1945. The maximum achieved during this period on an average was slightly over 13 passengers. Such loads are well below what might be considered compensatory requirements for single

line operations. It would be impossible, therefore, on any sound economic basis, to attempt to set up competition or competitive operations over a route with as thin a market as this.

Q. Can you translate these figures into dollar figures, the economics of the story?

A. In PS-6 we have shown for Panagra in terms of dollars and in terms of cents per mile flown the various economic factors which go into arriving at the result of the operation of the route. Let's take, for example, the year 1932. In that period, 1932, the passenger load was about 3.1 passengers. Passenger revenues of Panagra amounted to \$287,000 for the year or 25 cents of revenue per plane [fol. 434] mile. Cargo represented \$9,000 for the full year or one cent per mile. Other revenues, and this excludes U. S. mail paid, amounted to \$70,000 or 6 cents per revenue mile for a total revenue for the year of \$366,000 which, in terms of plane-mile earnings, amounted to 32 cents.

The total operating expenses for that year were \$1,837,000 or a per plane-mile cost of \$1.60.

The next item shows the operating profit or loss again before U. S. mail paid, and this would show a loss of \$1,471,000 or a per plane-mile loss of \$1.28.

Under the mail contracts Panagra received in 1932 \$1,618,000 or \$1.41. This means that with the mail pay—contract mail paid in Panagra was able to show a profit in 1932 of \$147,000 or a per plane-mile profit of 13 cents.

As you can well see, without the contract mail pay Panagra would have been in quite a pickle.

Q. If I read this correctly, the total per plane-mile revenue of Panagra from 19—from the beginning to 1938 ran from about 22 cents to 70 cents and the cost of operation per plane-mile ran from \$1.26 to \$2.70; is that right?

[fol. 435] A. That's correct.

Q. Now, again, that would show—that Panagra's commercial revenues never got more than 50 per cent of its expense; is that right?

A. On the average I think that is true.

Q. Now take the period after 1938. Up until 1945 were Panagra's revenues sufficient to break even in any of those years?

A. No, they were not, except in the year 1945 when they made one cent per mile.

Q. And your exhibit shows the subsidy that was paid, mail pay, all during those years; is that correct?

A. That's correct. Those are since 1939 mail pay was determined by the Civil Aeronautics Board on the basis of the need of the carrier and includes both the payment for the carrying of mail plus the subsidy amount. The largest portion of the payment is represented by subsidy.

Mr. Peck: Shall we move on to the East Coast now, your Honor, or shall we lunch in between?

The Court: Yes. A quarter after 2.

(Recess taken until 2:15 p.m.)

[fol. 436]

AFTERNOON SESSION

2:20 P.M.

R. G. FERGUSON resumed.

Direct examination (continued).

By Mr. Peck:

Q. Mr. Ferguson, would you now please discuss the economics of competition on the east coast of South America?

A. Yes.

Q. During this period from 1929 to '38, and then on to '46?

A. Yes. I would like to refer you to Exhibit PS4, included in the binder.

This exhibit shows the frequencies of operation on the Pan American east coast route of South America. I think it should be noted that on this route prior to 1942 the top frequency which we attained was four trips a week, and not until 1942 were we able to attain a daily frequency.

I think also that you ought to know something about the operation. During this period the route was around the periphery of the east coast, all the way out to Recife, which is the farthest east point in the Latin American continent.

[fol. 437] and that it was entirely, at least up until 1937, a flying boat operation. The first airplane used, the S38, was an 8-passenger airplane, and amphibian. The S41 was slightly larger. The Commodore, as I remember it, had a capacity of about 12 to 16 passengers. The S42, which finally got into operation in 1936, was about 28 to 30 passengers, as I remember it. The DC2, again, was a 12-passenger airplane; and finally, in 1940 the first DC3 was in operation.

Q. Which had a capacity of how many passengers?

A. 21 passengers.

Q. The route around the hump of South America on the east coast was used until 1942, when we started a service which operated with an intermediate point from Belem, Brazil, across the jungle to Rio.

Q. How about the passenger loads during this period?

A. Again, if we refer to the exhibits PS11, prior to 1933 our records are just not of sufficient magnitude to have come to an average load per airplane mile, and for the years '36, '39, '42 and '45. It was necessary that we take what were known as weight report summaries to derive this average load. These weight report summaries showed [fol. 438] from point to point the passengers that were carried, and I think there were some between Porto Spain and Rio, there were some 12 or 14 sectors that had to be analyzed, as well as a sector south of Rio, in order to come to these figures. It was quite a job. So we attempted to get it down by purely taking representative years to arrive at the average loads on this route.

During the period this would indicate a peak load in the year 1945 of 12.4 passengers. As far as the mail and cargo are concerned during this early period, we believe that the load shown for the Miami-Balboa route would approximate what we would have had on this east coast and that is shown on page—or PS10, where the maximum load attained of both passengers—I mean, of cargo and mail, was ninety-five hundredths of a ton.

Exhibit PS14 shows information with regard to the Latin American division as a whole, for the years 1929 to 1958, and is prepared in the same way in which we prepared the

data for Panagra in PS6, showing the dollar revenues as well as the revenues per plane mile for passengers, cargo and other, the total operating expenses and operating profit or loss before mail pay, then showing the mail pay received and the net profit or loss on the operation during [fol. 439] these years.

This shows that during this period of 1929 to 1945, only in the years 1942 and 1945 did commercial revenues cover operating expenses, and that is without regard to any return on investment.

Q. Am I correct at a glance here that even if you carried those figures through to the year 1958—that still the years 1942 and 1945 are the only years of that entire operation where the revenue equaled the expense, not including mail pay?

A. That is correct.

Q. What would you say, then, as to the feasibility all during those years—let's just take it from 1929 to 1946—of competition down the East Coast of South America?

Mr. Kenney: Your Honor, I object to that question. It calls for a man's opinion; it calls for a conclusion.

The Court: Yes, but he qualified him as an expert. I will allow it.

A. I think the answer is pretty obvious. PS-6 and PS-14 show the expensive nature of the subsidy support that is required for these operations. No airline could have operated during these years without subsidy. This situation [fol. 440] has continued, and at least for the earlier years.

The Court: Was that your question, sir?

Mr. Peck: Yes.

Q. The answer, as I got it from you, was that you couldn't stay in business except for subsidy; is that right?

A. That's correct.

Q. And that was true of one group down there, one airline, Pan American going to the East Coast; is that right?

A. Yes.

The Court: Would you read the question to me, Mr. Reporter.

(The question was read by the reporter as follows: —

“Q. What would you say, then, as to the feasibility all during those years, let's just take it from 1929 to 1946— of competition down the East Coast of South America?”

The Court: And you are satisfied with the answer?

He said in substance, as I understood him, that no line could operate without a subsidy.

[fol. 441] Mr. Peek: That's right, yes.

By Mr. Peek:

Q. And that was a subsidy during all those years to one air line which had all the business down the East Coast; is that correct? All the American flag business down the East Coast?

A. All the U. S. flag service, yes.

Q. Now, if that had been duplicated by another American flag carrier during those periods, what would have been the consequences?

A. I think the cost to the Government would have been doubled, and it might have been even more than doubled because of the splitting of traffic between two carriers.

Q. Now, can you tell us what was the Government's policy prior to 1946 with respect to subsidizing duplicate airline operations in South America?

A. Well, I think we can split that into two pieces. For the period up to 1938, which is the date of the Civil Aeronautics Act, the operations were carried on under U. S. mail contracts with the Post Office Department, and I know of no place where the Post Office issued more than one mail [fol. 442] contract for a particular route. In other words, there were no places in the international field where two contracts were issued to support competitive services.

With regard to the 1939—

Q. Those contracts were for what period? How long did they run?

A. Ten years.

Q. All right. Go right ahead.

A. From 1939 to 1945 the Board did not find that du-

plicate service on these routes was required. By the Board I mean the Civil Aeronautics Board.

Q. In other words, after 1938 the Civil Aeronautics Board had the authority and discretion about mail pay or subsidy; is that correct?

A. That's correct.

Q. And at least up until 1946 had not done anything about duplicating routes?

A. That is correct.

The Court: Were there applications for certificates which were denied in those years?

The Witness: My recollection is I do not believe that there was any denial of a certificate during that period. However, I may be wrong about that.

[fol. 443] By Mr. Peck:

Q. Would it have been possible at any time during those years for duplicate service to be established and be maintained except by at least a duplication of mail pay or subsidy?

A. In my opinion it would not.

Q. Now let's move over on to the Miami-Balboa segment, if you will, Mr. Ferguson, and indicate the economics of a duplicated service on that segment for the years 1928 to 1946.

A. Again I do not think that competition on this route was economically feasible during this period.

Q. Why not, please?

A. Well, I think we had better look at Exhibit PA-3—

Q. Yes.

A. —which shows the operations over this route. During this period and up through 1937 again the frequency of service which could be maintained was two services a week. It was not until 1942 that we got to a daily service on this route, and by the end of 1942, which I might comment is the first year of the Second World War, we were up to two frequencies a week to Balboa and that the service at that [fol. 444] point was serving the demand for communications between the Canal Zone and the United States in view of the large military installation at the Canal Zone.

PS-9—

Q. After the war did it fall off?

A. After the war it got back down to a daily service.

Q. All right. Go right ahead.

A. PS-9 shows the average passenger loads on this route. The maximum up through 1938 got up to 12.3 passengers per airplane-mile. During the entire period from '29 to '38 the average loads were about 6.3 passengers, and even for the period from '39 to '45, the maximum loads carried per mile were about 20 passengers and the average—I thought I had figured the average, but it would run somewhere around 16 passengers.

If you look at PS-10, which follows, you will note that in the first period we could not break out—that is from '36 to '41 and we had no statistics prior to that—the load of mail and cargo got up to a high in 1940 of 64, 100 of a ton, and in the period of '42 to '45 got up to a maximum of 95, 100 of a ton.

[fol. 445] You will note that the average mile load got as high as about 4, 10 of a ton and the cargo load about 1, ton.

Q. What is the significance of those figures in economic terms?

A. Well, if we put it in terms of revenues based on these average loads, the passenger and cargo loads for the period '28 to '38 would have produced about 90 cents per plane-mile. Operating expenses, as shown in PS-14 for this period, and we have had to use here the average expense for the Latin-American operation because there was no breakdown as to costs applicable to any particular aircraft type—the average for Latin-American operation was \$1.76 per plane-mile. In other words, operating revenues were slightly more than half the cost of operating the route. Obviously a route which could not half support one airline could not support two.

Q. Now will you take the period from 1938 to 1946 and discuss it in the same terms, giving your opinion as to the economic feasibility or competition between Panagra and Pan American on that route during that period?

A. Well, again, if we look at PS-3

[fol. 446] Q. Discuss that, if you will, please, first in the terms of the traffic?

A. Well, as I stated before, the average passenger load

between Miami and Balboa for the '39-'45 period was about 16 passengers. Even with this kind of a load we could not produce a profitable operation as a single carrier on the route. If you project the 16 passengers into revenues at the average yield per passenger mile, this would produce about \$1.68 of passenger revenue; and if you assume about a half a ton of cargo on board, and assume also a dollar per ton mile as the cost of revenue from the carriage of cargo, you come up with a figure of about \$2.18 as the revenue derived from the traffic on this route.

During the period '41 through '45 we were operating Boeing 307, four-engine aircraft, on this Miami-Balboa route, which created a cost which was somewhat higher than the divisional average. If you assume this cost with its related overhead, the cost on this route during the '41-'45 period would be about \$2.53 per mile. This certainly would not be a place where an additional carrier would aid the situation at all.

[fol. 447] Q. Did Pan American break even at any time on that route for the years up to and through 1945?

A. There were two years in there in which the commercial revenues covered costs on the basis of average cost for the division. But if you take these costs based on the 307 operation, I do not believe that it would break even.

Q. Was the service subsidized all during these years?

A. Yes, it was, very heavily.

Q. Now, would you say there was any reason other than the thinness of traffic which you have detailed that would enter into a judgment as to whether competition between Pan American and Panagra was feasible on that sector?

A. Well, the fact that a carrier, confined to this route, as Pan American would have been under competition with Panagra, would make quite a difference.

Q. That is, you are assuming now, I take it, and addressing yourself to that assumption, that the Pan American service from Miami to Balboa was duplicated by Panagra, but that the Panagra service from Balboa down the west coast of South America was not duplicated by Pan American; is that right?

[fol. 448] A. That is correct.

Q. All right.

A. (Continuing) And in which case there would have been very little chance that Pan American could have survived on this route. I think we have to distinguish here between a sector of route, such as is here envisioned, and competition on such a sector, as compared to full route competition, where there is access to full traffic markets. For example, Braniff, extension down the east coast permitted full competitive operations. Each carrier had a route structure which linked major traffic points and traffic generating areas, and thus made it reasonably able to provide competitive service.

However, in the case of Pan American and Panagra, where the two services complement each other and are complementary rather than separate, the carriers are completely interdependent, one upon the other. As I explained before, the Pan American Miami-Canal Zone link meets head on with Panagra at the Canal Zone, thus providing a through service.

If, for example, Pan American were in competition on this route and we were competing for the traffic over the sector, Pan American would be at a very great disadvantage. [fol. 449] tage.

If you look at PS16 of our exhibits, you will note here that we have made a segregation of the amount of local traffic over the sector, and the amount of through traffic to points south of Balboa. This shows that in the year—well, it is based on the months of September, '57, and March, '58, on those two months—that of the total traffic over the sector, about 58 to 65 percent is represented by through traffic.

The question which this raises is, what would be the result if Panagra had been extended with Pan American on this route?

Q. And Pan American not extended down the west coast?

A. And Pan American not extended down the west coast?

Q. But deadended at Balboa?

A. That is correct. The result would be that Panagra would probably have taken almost all of the through traffic from over the Miami-Canal Zone sector, because it can serve it with a one carrier service from Miami to destination.

Q. One airplane, no change.

[fol. 450] A. One airplane and no change. And this would mean that Pan American would be in a position where it could, or where it might get as much as one-third of the local traffic.

Q. Well, let's see. The local traffic is about, you say, somewhere between 40, 35 and 40 per cent.

A. That is correct.

Q. Now, you wouldn't say that Pan American and Panagra would about break even on the local traffic?

A. Oh, definitely not. The Panagra, with two-thirds of the traffic, and let's just say for the moment some portion of the local traffic, would be able to build frequencies which Pan American could not match except at a very high cost in subsidies or in loss to Pan American as such. Actually, with all the traffic, all the through traffic on Panagra and a substantial portion of the local traffic, Pan American would be able to operate at a very, very meager service over the route, and even if they were to have a service which can once or twice a week, it is only the passengers that would travel on that day, which would be divided between the two carriers, and people don't wait around for one or two frequencies a week if there is a daily service on which they [fol. 451] can travel. In other words, they don't pile up a third of the traffic for the two days that Pan American is going to operate.

Q. Well, with what consequence then if Pan American was going to compete at all for the local traffic?

A. Well, the consequence would be that we might operate as much as one and a half frequencies during a week, or if we operated a daily frequency in trying to compete, we would probably have a couple of passengers aboard per day.

Q. Well, if you were going to stay in the market and have what you call competition, how many frequencies would you have had to operate?

A. Well, we would have had to operate at least a daily frequency.

Q. And what would have been the economics of that with the passenger loads you would have had?

A. Well, I think under that circumstance, Pan American would have had to abandon the route. I do not think that

Pan American could operate a daily frequency during this period between Miami and Balboa and carry two passengers per day or three and hope to have the Civil Aeronautics Board find that under honest, economic and efficient management we had operated this route. I think they would [fol. 452] have found that we had operated excessive capacity when there was no traffic to be carried, which would mean in the final analysis, in determining subsidies, that the Board would not support this service.

Q. Let's get that clear. If the service was going to be there, wouldn't the Board automatically have subsidized it to the fullest extent necessary to maintain it?

A. I don't think they would have.

Q. Why not? What is the policy of the Board and the practice in this respect?

A. Well, the Board reviews the operations of a carrier, and where they find that a carrier has put on more service than is required, their policy is not to recognize costs of such service in determining subsidy.

Q. And the alternative aside from abandonment would have been what?

A. The alternative aside from abandonment would have been that the stockholders would have paid the bill, and I don't think they would have stuck very long with that.

Q. Let us move now, Mr. Ferguson to the through flight agreement between Panagra and Pan American in 1946. Would you first please give us the principal terms of that [fol. 453] agreement, so that the Judge will have it in his mind?

A. Yes. Under the agreement Pan American leases aircraft and crews from Panagra for operation over the Miami-Canal Zone sector. The aircraft, although operated by Panagra crews, are on this sector of route providing the Pan American service between Miami and the Canal Zone. This provides for the public a one plane service from Miami, straight through the Canal Zone, to destinations on the west coast and B.A. Pan American pays all of the expenses, including the overhead on the operation incurred by Panagra for flying this sector.

Q. Now, let's see. That would represent--what does that represent to Panagra, reimbursement for the cost of oper-

ating the plane by its pilots and completely handling the operation?

A. That is correct. It is reimbursement for all costs which you consider as direct flying costs as such.

Q. Well, then, what does Panagra get out of this operation? That is just breaking even, isn't it, up to now?

A. That is correct. They are made whole for all costs involved in this operation.

[fol. 454] Q. How can they make a profit?

A. Well, in the first place, there is no time when they have a risk in so far as traffic is concerned. In other words, if the traffic drops below what is required to provide a profit, Panagra has no risk involved whatsoever.

In addition, Pan American guarantees Panagra a maximum return on their investment which has been found to be reasonable by the Civil Aeronautics Board.

Q. Investment in what?

A. Investment in the equipment used in this operation over the Miami-Canal Zone sector which includes the aircraft, engines, spare parts, any maintenance, ground facilities which they may have. It also provides a return on investment in funds which have been earmarked for replacement of aircraft which would be used on this route and a return on investment in the working capital which represents the cash expenses involved which they have employed in this operation.

Q. And what is that guaranteed rate of return on the investment?

A. The rate originally was set by the Civil Aeronautics [fol. 455] Board as 10 per cent return after provision had been made for taxes. In other words, the 10 per cent is a net after the taxes. This was later reduced to 9 per cent for international operations.

There is also a rate which has been employed where there is no risk involved. The Civil Aeronautics Board stated that as 7 per cent. However, in a case of this kind where there is no risk whatsoever, it would seem to me that a fair rate might have been a rate such as you would have for borrowing money, even a primary of 4 or 5 per cent.

Q. In any event, Pan American pays Panagra 9 per cent; is that correct?

A. That's correct, and that is better than they can earn on their own operation below the Canal Zone.

Q. How does it compare with what Pan American can earn on its own operation?

A. It is substantially higher than we have earned on our own operation.

Q. Are there any other costs that Pan American is required to absorb in connection with the through-flight operation other than the ones that you have detailed?

A. Yes. At the time that the through-flight agreement was signed we had a contract with our flight crews which we thought would permit us to use the Panagra flight crews of this sector of Pan American route. However, it finally turned out that for every crew, Panagra crew, used over this route Pan American had to have a crew standing by on the ground under the labor contract. This meant that, in other words, we were paying for the Panagra crews through the through-flight agreement and in addition were paying our own crews for not flying.

Q. What did that amount to in 1958?

A. In 1958 this amounted to \$168,000.

Q. Don't you get that back through a subsidy?

A. No, we do not. The Board decided to disallow that as not being justifiable or eligible for subsidy support.

I might say that we have brought this matter up with our partners to see if we couldn't get an adjustment of some kind in this matter of payment, but our partners have not seen fit to recognize it.

Q. The question has been raised about a possible Lima [fol. 457] Rio operation for Panagra. Would you comment upon the economics of such an operation, Mr. Ferguson?

A. Yes. I think that the operations over this route have been submarginal practically from the beginning.

Q. What are the operations over at the present time?

A. At the present time Braniff has a service from Lima to Rio, and Panair do Brasil has.

Q. What has been the Braniff experience?

A. The Braniff experience—

Mr. Kenney: Your Honor, even as an expert how can this man speak of the Braniff experiences? I object to the question.

Q. Do you know what the Braniff experience has been as far as how often, the frequencies with which they have operated that route?

The Court: Do you know?

A. Yes. Braniff has been operating or is now operating about three frequencies a week over the route, and average passengers per day on the route amount to about 13.2 round trip passengers per day.

As far as the—

[fol. 458] Q. What about Panair do Brasil's experience?

A. As far as the Brazilian experience is concerned, Panair do Brasil started its operation in February, 1951, with one round trip per week. The service was suspended in July due to lack of traffic and was reinstated in April, 1954, with one round trip per week.

Q. With one carrier operating one round trip a week and another three with an average passenger load of around 14 passengers a round trip, what would you say as to the economics of putting another operation in?

A. It doesn't look to me like it would support the service of an additional operator.

Q. I would like to have you now explain to the Court the exhibits which you have not already referred to during the course of your testimony, Mr. Ferguson. First PS-1, the very first one; would you tell us what that shows?

A. Well, this exhibit shows the number of aircraft which were owned by Pan American's Eastern Division and Western Division, which is the Latin-American operation, during the years through 1942, I believe.

[fol. 459] Q. This is PS-1, you are talking about?

A. PS-1.

Q. That goes through 1958, doesn't it?

A. No, it does not.

Q. It does on mine. According to the heading on my PS-1 it covers Pan American aircraft used by the Latin-American Division for the years 1929 to 1958. Correct?

A. That is correct. I was looking at Exhibit PS-2.

This exhibit summarizes the capacity and speed of various aircraft types used by Pan American's Latin-American Division from the start of operations to date. It is here

purely for informational purposes to show the characteristics of the aircraft which were used primarily during the early stages of operation in Latin America.

Q. Now PS-2. What is that, please?

A. That indicates by sectors the type of equipment used in the Latin-American operations up through the year 1942. The exhibit was initially submitted in Docket 779, and we have not attempted to bring it up to date at this point.

Q. I notice you referred to the Western Division in this. [fol. 460] What do you mean by the Western Division?

A. Well, in the early days of the Latin-American operation there were two separate divisions. The Eastern Division operated from Miami into the Caribbean to the Canal and down the East Coast of South America. The Western Division was responsible for operation to and through Mexico and Central and South America to the Canal Zone in the early stages, and in the late 1930s its operation was extended across the North Coast to Port au Spain.

Q. I think you have sufficiently covered PS-3 in your previous testimony. Tell us what PS-4 is, would you please?

A. PS-4 is a record of Pan American's operations down the East Coast of South America to which I previously referred.

Q. Yes, you have mentioned it.

A. To aid in understanding the exhibit it should be noted that from 1931 until the middle of '48 all services were operated out of Miami, and beginning in 1946 services were inaugurated from Miami through San Juan and Port au Spain down the East Coast.

[fol. 461] I think also that it might be noted that Pan American began its cargo service down the East Coast in 1946 and has continued that service throughout. The service in 1954 was transferred, however, with New York as the origin point rather than Miami.

Q. I notice you were having from New York as many as two flights day in 1947, '48, '49 I guess, and you haven't had that many since out of New York.

A. We ran into an international problem with the government of Brazil in which restrictions were put on the amount of capacity which Pan American could operate between the United States and Brazil and Rio and between

Rio and Buenos Aires. These restrictions have been in effect since, I believe, 1946 and are in effect today, as a matter of fact.

Q. Do you have any comment to make also about competition?

A. The competition on this route has been growing materially during the last—I would say the last eight or 10 years with both Brazilian carriers and Argentine carriers getting into the market in a very strong way.

Q. Do you have any comment upon PS-5, Mr. Ferguson? [fol. 462] A. PS-5, of course, is the history of the Panagra, Balboa, B.A. services, and I would only like to note that beginning in 1947 the Pan American through-flight services were inaugurated. This has led to a very healthy growth as you will note by the increase in frequencies up to date, and also to note that the frequencies of the Panagra service from the U. S. to B. A. substantially exceed those which are provided by Pan American.

Q. On the East Coast?

The Court: Excuse me. It seems to me that from 1942 the frequency was the same.

The Witness: From '42 to—

The Court: You said it increased in '47.

The Witness: Yes. Oh, I am sorry. '49 is the first year in which there is an increase over daily except for the cargo service, one cargo service in '48. But passengerwise the frequencies were increased to nine frequencies in '49 and to 11 frequencies in '58.

The Court: Is that because of the cargo?

The Witness: No, that is passenger.

The Court: DC-14s are passengers?

The Witness: That represents tourist class.

[fol. 463] The Court: Yes. All right.

May I just interrupt? Would a tourist plane be classified under your concept of people traveling on business?

The Witness: Well, I think generally, your Honor, that business people travel first class.

The Court: I would guess. At least they charge it to business.

The Witness: That's right.

The Court: All right.

By Mr. Peek:

Q. I know you have commented pretty fully on PS-6 and 14, but I want to be sure that it is clear as to what is included in the headings here total mail pay in PS-6 and 14. You have got total U. S. mail pay.

A. Yes. In the early days of the operation, as I pointed out, through 1938 these were payments made under mail contracts. Thereafter, up to 1953, the mail pay was determined by the Civil Aeronautics Board and paid by the Post Office as a lump sum on the basis of a rate per mile flown in most cases. As a matter of fact, in all cases it was stated that way.

That included both subsidy and what is known as compensatory mail pay which is the pay for the actual service of carrying the mail.

From 1954 on the subsidy payment was separated from the compensatory mail paid, the Post Office paid the compensatory mail pay which was for the service of carrying the mail, and the Civil Aeronautics Board paid the subsidy amount. However, the CAB or Civil Aeronautics Board determined the level of subsidy and the rates per ton-mile to be applied in arriving at the compensatory mail pay, and the Post Office Department accepted the rates which were made by the Civil Aeronautics Board in arriving at the amounts to be paid to the carriers for compensatory mail pay.

[fol. 465] Q. So when you talk about total mail pay, you are talking about total government payment, whether by way of carrying mail subsidy or both together, and any combination.

A. That is correct.

Q. And during the early years, is it true that practically all that so-called mail pay was a subsidy, and really, very little of it related to carrying the mail?

A. That is correct.

Q. Now, what is the purpose of PS15, Mr. Ferguson?

A. Well, as I pointed out in my previous testimony, we wanted to try to get to a cost which was representative of the cost on the Miami-Canal Zone route. This exhibit shows operating costs per revenue plane mile for aircraft employed by Pan American on this route for services during

the years 1941 through 1945. In effect, this exhibit supplements PS14, which shows average division cost per mile for the period 1929 through 1938, and beyond.

Q. How about after '38? Have you been able to segregate it?

A. Actually, it is only after 1938 that we have been able [fol. 466] to segregate costs by types of equipment employed, and have come to these figures.

Q. What about Exhibits PS18 and 18-A? What are they in here for?

A. This exhibit is prepared in rebuttal to the Government Exhibit 101, GS101, which purported to show a comparison of the growth of Pan American and Panagra in terms of passenger miles for the period 1929 through 1957.

The exhibit, in the form presented by the Government, I think, is quite misleading. One thing, the period prior to the adoption of the Civil Aeronautics Act in 1938, was a period of route development.

Q. That exhibit was a map, by the way, was it not, a chart, rather. It was a chart, was it not?

A. It was a chart.

Mr. Peck: Is it here?

I thought I would like to hand it to the Court so his Honor would know exactly what we are talking about. It is this chart.

Q. All right, go ahead, Mr. Ferguson.

A. Once the route from the Canal Zone to Buenos Aires, the Panagra route, was established, it seems to me that the objective of the Panagra development was pretty well [fol. 467] established. On the other hand, much of Pan American's route pattern developed in Latin America, such as the extension down the east coast, was not undertaken until a later date, during 1931-32. Since the Pan American route encompasses a larger overall objective, and the development came later and took longer, it is our feeling that Pan American growth, in terms of passenger miles, was substantial—would substantially exceed those of Panagra's up to the end of 1938, purely from the standpoint of development of the route deal.

You start with zero as a base for the two years, and one carrier has a more extensive assignment than the other, as

was certainly true with Pan American as compared to Panagra, one carrier is bound to show substantially more growth than the other. I do not believe, therefore, the comparison made by the Government is one which actually shows the story. I think it would be much fairer to make the comparison on the basis of the two operations after this development period through '38, and at such time as the Civil Aeronautics Board, or Civil Aeronautics Act was adopted.

We have therefore made the comparison from 1939 through 1957, to see how the two companies have fared. [fol. 468] We have made one adjustment in our figures, in that we have eliminated the passenger miles which were developed on the New York-San Juan route. We feel that that route is much more in the nature of a domestic route; that there were so many items influencing the development of this route and influencing it, I would say, outside of Pan American, such as government agencies and the territory of Puerto Rico insisting that we make available very economical fares on this route in order to develop a free exchange of Puerto Rican population with the United States.

I might say that Pan American put in its first tourist service on this route at rates of about four and a half cents per passenger mile, and we also inaugurated—and that was in 1948—and we also inaugurated in 1956 the first, what is known as thrift service. Under the thrift service rate you can fly from Puerto Rico to New York, a flight of some 1,600 miles, for about \$46, which, if computed out to a passenger mile rate, comes somewhere between two and a half or three cents per passenger mile. I believe it is the lowest rate in the world, actually, for air transportation on a scheduled operation basis.

The Court: I don't understand why you did that? You [fol. 469] say the government asked you to, originally?

The Witness: There was great pressure put on Pan American by the government of Puerto Rico to provide a very inexpensive service, so that the Puerto Rican people could fly from the island to the States.

The Court: You are not talking about the thrift service?

The Witness: Well, I was talking—

The Court: Of both?

The Witness: Tourist service.

The Court: But the pressure came from the Puerto Rican Government?

The Witness: The pressure came from the Puerto Rican Government, and it was supported by the Department of Interior.

We put this service in, and the amount of traffic that has been developed the route is fantastic. The San Juan—the New York-San Juan sector itself, on local service only, has amounted to better than a third of the passenger miles of our Latin American operation. I thought I had figures here, but I don't seem to. Actually, in some instances I think it was even pressing 40 per cent of the total passenger [fol. 470] miles of the Latin American operation. So that we felt that this service was not in the same category as the international service, where the development of traffic was quite a different thing, so we decided to make the comparison by the elimination of the New York-San Juan service, and on that basis, as you can see, our growth from 39 to 57 has been about 1587 per cent, as compared to Panagra's 1,717 per cent.

Q. And is that relative growth then charted on PS-18a, which is your full blown up versions on the easel there?

A. That is correct.

Q. The broken line being Panagra and the solid line Pan American; is that correct?

A. That is correct, and it is charted in terms of percentage growth by years. I might say that taking the same period, 1939 to 1957, and without the elimination—

Q. Yes, I was going to ask you, what happens if you keep Puerto Rico in?

A. If we keep Puerto Rico in and make the comparison on the basis of growth in revenues, Panagra comes up to about the same figure as they have in passenger miles, slightly less, and our figure is slightly less than the [fol. 471] figure we show for Pan American, in terms of percentage growth.

Q. You mean slightly less than Panagra or—

A. Let me state it this way:—

Q. All right. Pardon me. I don't want to confuse you. I want to be sure that we get it right, that is all.

A. Well, the Pan American percentage, as I remembered, is approximately 1500 per cent, and that includes the revenues from the New York-San Juan operation.

Q. Yes?

A. And that compares with the growth of about 1700 per cent for Panagra.

Q. I see. Now what is the purpose of PS-20?

A. PS-20, as I pointed out—

Q. No, I don't think you pointed that out before.

A. No, I have not. I have not referred to that before. I am sorry.

Q. I think that is the first reference to PS-20.

A. The Department of Justice—

Q. Just tell us why we have got PS-20 here?

A. Well, PS-20 is in here in rebuttal to an exhibit which [fol. 472] the Government has submitted, which was a letter from Mr. Clark, the vice president of W. R. Grace, which pointed out that the Pan American sales effort was selling only about three and a million dollars of revenues, and that Panagra was selling about six and a half million in its operation.

Q. Exhibit 541, that exhibit, is Mr. Clark's. All right, go right ahead.

A. We decided to take some figures of our own and see what they look like on our own records, and this shows that in 1949, which was the year covered by this—

Q. Pardon an interruption, Mr. Ferguson. I would like to make one thing clear about that exhibit, to begin with, Government's Exhibit 541, which was talking about sales by Panagra for Panagra's account in South America, as compared with Pan American sales for Panagra's account in the United States. Would you make a comment as to whether those are comparable figures in any event?

A. No, they are not. Panagra's sales might not have been for Panagra. It could have been for most anybody. They could have been for connecting carriers. They could have been for Pan American; they could have even been for [fol. 473] domestic carriers, in that if they sold transportation from Lima, let's say, to New York, in 1949, they

would be selling, for example, for Pan American, they would have been selling for Eastern or National and themselves.

Q. And I have got in mind what I would assume is more important, check me, is that it would have included all the sales for Panagra's account of South American traffic which doesn't come to the United States at all.

A. That is correct.

Q. Wouldn't that be right?

A. That is correct.

Q. That must be a tremendous percentage of the Panagra traffic, isn't it?

A. I think it is quite substantial, and their local traffic on the west coast.

Q. Whereas Pan American sales for Panagra would all be sales from passengers in the United States, wouldn't it, or practically?

A. Well, they would—the sales which we segregate would be the actual sales which wound up in Panagra's revenues.

Q. But I mean, they would be passengers, wouldn't they, [fol. 474] traveling from the United States, wouldn't they?

A. No, it would be passengers, any passengers, that Pan American sold for them, whether it would be from the United States, whether it be from Latin America, whether it would be from Europe.

Q. Well, I mean, you wouldn't sell much for Panagra, would you, from Lima to—well, Lima to BA, or from any other place along the route, South American traffic that didn't come to the United States?

A. Our Rio office could very easily sell Rio-BA-Lima.

Q. Yes, but as I understood these figures, were sales in the United States by Pan American in the United States for the account of Panagra.

A. Oh, well, that is a different kettle of fish.

Q. Yes. Well, that is the comparison.

A. Well, I wasn't sure that that was true. Maybe it is.

Q. I am quite sure that it is true. Well, you accept that assumption for the moment, that you are comparing Pan American sales in the United States for the account of Panagra with Panagra's sales in South America for the account of Panagra; are they comparable at all?

[fol. 475] A. I don't think they are. I don't think the two figures are comparable.

Q. And am I not right that Pan American in the United States would not be making any appreciable sales for the account of Panagra just within South America?

A. You mean as a local flight?

Q. Yes.

A. On the west coast?

Q. Yes.

A. I think there would be very few of those.

Q. All right. Go ahead then with what you have done with PS-20.

A. Well, we have taken the—let me talk about the year 1949 first. In that year Pan American made the sales and credited to Panagra the amount of those sales, which represented travel over Panagra's route, and in that year the Panagra sales represented 49.1 per cent of Panagra's total passenger revenue.

In the years 1954 through 1958, the figures under Panagra total passenger revenue, under the figure passenger revenue sold by PAA, represent direct billings from Panagra for tickets sold by Pan American, which were picked up on the Panagra routes and then billed to Pan [fol. 476] American. So that there is no question that these amounts actually represent amounts of revenues which Panagra has derived from sales by Pan American, and the year, as you can see, the trend, '54 to '58, it has gotten up to almost 61 per cent of the total Panagra revenue which was sold by Pan American.

Q. Now, what is the purpose of Exhibit PS-21, Mr. Ferguson?

A. This exhibit shows the subsidy accruals as estimated by the Civil Aeronautics Board for Pan American's Latin American operations for Panagra and for Braniff, in their Latin American operations. I previously explained that the shift at the end of 1953, when the CAB commenced making separate determinations of subsidy requirements, for the period prior to 1954 the figures shown are taken from a study made by the Civil Aeronautics Board staff, purely for information purposes, and they have determined in these years what the estimated actual subsidy was as opposed to the compensatory mail pay.

Q. Do these figures include full year subsidy in all instances, and are they complete?

A. No, they are not. Under the Pan American heading, the year 1948 represents subsidy only for the three months, [fol. 477] and through June, 1948, and the item of fifteen hundred dollars—a million five hundred thousand dollars, for the year 1957 is for the three months, July to September, 1956.

Q. Well, how about the fact that no subsidy is shown for 1958? Does that mean that there was no need for a subsidy?

A. Not necessarily. The Pan American rates or subsidy have not been determined for the period October 1, 1956, to the end of December, 1958.

Q. Are you asking for subsidy for that period?

A. Yes, we are asking for subsidy for that period.

Q. Has the Board made any calculations in reference to it?

A. Well, in their recent order, or rather, show cause order, in which they ask Pan American to show cause why its—why the mail rates should not be closed as of January 1, 1959, they computed the amount of the need of Pan American for the period October 1, 1956, through December 31, 1958, and if deferred taxes, which are an item that is in question as to the policy which the CAB will follow in determining need, are included, they determined our need for subsidy to be for this period about \$23,000,000 for the Latin American operation.

[fol. 478] Q. I notice that your exhibit here does not have anything down for subsidy for Panagra after 1956. Does that mean that Panagra isn't seeking and doesn't need any subsidy for that period?

A. No. Well, I will take that back. Let me say first that the subsidy shown for fiscal year 1955 of \$1,100,000 is only for the last six months of 1954. For the period from January 1, 1955, through—well up to about October, 1958, Panagra's rates have been closed and no subsidy will be paid up to that time. In October, however, 1958, Panagra filed a petition with the Civil Aeronautics Board to reopen its rates and to establish a subsidy—establish the annual subsidy requirements for their operation.

Q. What did they say their requirement was?

A. The amount shown in their petition was approximately \$6,800,000.

Q. Per year?

A. Per year.

Q. During the course of your testimony you made some comment about IATA, but I am not sure that you covered the last thing that I wanted to ask you here, the next-to-the-last. Are the rates charged by American flight carriers [fol. 479] in Latin-America governed by resolutions of the International Air Transport Association as approved by the Civil Aeronautics Board?

A. They are. Rates for Argentina, Brazil, Chile, Uruguay and Paraguay were fixed—have been fixed and set since about 1950 by IATA, and for other countries in the Western Hemisphere they have been established since about 1951.

Q. Is this all approved by the Civil Aeronautics Board?

A. The right for the carriers to participate is approved.

Q. In a resolution of the Board?

A. That's correct.

Q. My final question, Mr. Ferguson: Can you tell us what the investment of Pan American was in the Rancho Boyeros Airport in Cuba in the year 1947? What was it at that time?

A. In '47?

Q. Yes.

A. I have not got it broken down in that way.

Q. How close can you come to it?

A. Well, I would say that in 1947 it was approximately a million dollars, and up through '52, the year in which [fol. 480] the airport was sold by Pan American, we had invested \$1,372,000.

Mr. Peck: I think that is all on direct, your Honor.

The Court: We will take a short recess.

(Short recess.)

Cross examination.

By Mr. Kenney:

Q. Mr. Ferguson, you testified about a number of different subjects, and the last one you finished with was IATA, and that is the one I am going to begin with.

Are you an expert in IATA procedure?

A. As far as the economics which go into rates are concerned, I am.

Q. Do you have knowledge of the way the question of setting fares is handled by IATA?

A. Generally, yes.

Q. As I understand it, and I hope you will correct me if I am wrong, these fares are supposed to be arrived at actually at the time of the IATA conventions; is that not so?

A. By a unanimous adoption of fares by the conference.

Q. There is not supposed to be any exchange of information [fol. 481] or any settling of fares between the airlines prior to the convention; is that not true?

A. I think that is correct.

Q. By the way, Mr. Ferguson, did you testify in CAB Docket No. 2423?

A. I don't recognize it by number. Maybe if you can tell me what it is.

Q. That was the through flight.

A. I did.

Q. You did testify?

A. I did.

Q. Wasn't your testimony on the subject of fares to some extent?

A. Not that I remember.

Q. You don't recall that?

A. No, I do not.

Q. Isn't it also true under the IATA rules that the fares which are arrived at at the conventions apply only to the members of the IATA?

A. That is correct.

Q. In other words, there are no provisions under IATA which would permit an IATA carrier to agree on a rate with a non-IATA carrier, is there, Mr. Ferguson?

[fol. 482] A. No, not agree if you mean together they agree, no.

Q. That's right. Do you know whether in 1953 Aerolineas Argentinas was an IATA carrier?

A. I do not remember whether they were members of IATA at that point or not.

Q. Do you know that Pan American had a rate agreement with them?

A. No, I do not.

Q. You do not know that?

A. No.

Q. Mr. Ferguson, I believe you testified that 53 per cent of the tourists go on round-South American trips; is that right?

A. No, I did not testify to that. I testified that of the total U.S.-B.A. passengers 53 per cent purchased round-South America tickets.

Q. That is the total. Of the total, 53 per cent do that?

A. That's correct.

Q. Mr. Ferguson, you were not trying to establish by your testimony, were you, that there is no competition between Pan American and Panagra?

A. I think my testimony speaks for itself.

[fol. 483] Q. Well, I will ask you if that is what you were trying to establish.

A. I was trying to establish the extent of competition in so far as Pan American and Panagra are concerned.

Q. There is competition; is that right?

A. I told you the limited extent to which it was established.

Q. Isn't it a fact that as far as Buenos Aires is concerned, that the Pan American people down there look upon Panagra as their chief competition?

A. May I have that question, please?

(Question read.)

A. To the extent that there is competition that is probably true. On the other hand you have also Aerolineas, you have Transcontinental, both Argentine carriers, and you have Braniff.

Q. Well, I am going to read you from Government's Exhibit 316 which is a memorandum dated March 30, 1951.

and it covers a meeting of the Pan American people in Buenos Aires with the Walter R. Thompson agency, and it says the primary competition is with Panagra and the secondary with Argentine airlines and Braniff. Would you agree that that condition still exists today?

[fol. 484] A. It depends on what you are talking about. It depends on the extent to which you can compete, and I think you have to measure that quantitatively.

Q. Let us put it this way, Mr. Ferguson: Isn't it a fact, although you talk about the Canal Zone, that Panagra, through the use of interchange agreements, actually has its terminal in New York and in Buenos Aires?

A. You mean with the through flight?

Q. That's right.

A. May I have the question again, please?

Q. Well, let me rephrase it. As a practical matter Panagra flies from New York to Buenos Aires, does it not?

A. That's correct.

Q. And so does Pan American?

A. That's correct.

Q. And they compete for passengers on that run; is that not correct?

A. I admitted that they competed for a certain phase of the traffic, that's true.

Q. They compete for all the traffic that goes from New York to Buenos Aires, don't they?

[fol. 485] A. No, they do not.

Q. Don't they each try to sell people going from New York to Buenos Aires and Buenos Aires to New York tickets?

A. We try to sell both services.

Q. Isn't it true, Mr. Ferguson, that if Pan American had not stopped the development of Panagra throughout the years there would be even a great deal more competition today?

Mr. Peek: I object to the form of the question.

The Court: Sustained.

By Mr. Kenney:

Q. Let's take the case of Miami. Pan American prevented Panagra from coming into Miami for a long time, didn't it, sir?

Mr. Peck: If he knows.

Q. If you know.

A. I don't know whether you would call it prevent or not. Panagra came into Miami on the basis of Pan American's permission for them to come in.

Q. Are you familiar with the CAB hearing in Docket 779? [fol. 486] A. Yes, I am.

Q. Do you know whether or not in that hearing Pan American took the position that if Panagra was allowed to come through to Miami it would be in direct competition with Pan American?

A. I know of Docket 779, and I know the basis of the case as far as that part is concerned.

Q. Are you not familiar with Pan American's position which I have just—

A. It opposed permitting Panagra to file an application for the route.

Q. Because it would put it in competition with Pan American; isn't that correct?

A. Because it would put Pan American out of business.

Q. And would put Panagra in competition with Pan American?

A. The reason for it was because it would put Pan American out of business on Miami-Balboa.

Q. It would also put Panagra in competition with Pan American, would it not, sir?

A. I don't think there would be any competition under the circumstances that I see.

Q. You are familiar with the fact that the Board has on [fol. 487] several occasions made the statement that Panagra should have been allowed to come through to Miami on its own certificate; are you not, sir?

A. I don't know the utterance to which you referred.

Q. Let's take Docket 779. Isn't it true that the Board took the position that Panagra should be allowed by its parents to come through to Miami?

A. I don't think so. I think they decided they had no jurisdiction.

Q. Didn't they later urge that the owners take some action to see that Panagra is given its own certificate to come through to Miami?

A. I don't remember that.

Q. You don't know, sir?

A. No.

Q. Well, do you know whether they urged that Panagra be allowed to come through to the Eastern United States in connection with Docket No. 525 which was a Latin-American route case?

A. No, I don't know that.

Q. You don't know those things.

A. No.

Q. You did testify about the economics of the Rio-Lima [fol. 488] run. It is true, is it not, Mr. Ferguson, that Panagra wanted to get a certificate to operate from Rio to Lima and from Lima to Rio?

A. Yes, I think they did.

Q. And Pan American didn't permit it; isn't that correct?

A. Pan American didn't think they should operate it because it was not economically feasible.

Q. And because of the peculiar way in which Panagra is set up, one of the partners can stop action by the other; isn't that right, sir?

A. Well, sometimes they don't agree.

Q. Well, you have been with Pan American since 1929, I believe you testified.

A. That's correct.

Q. Are you familiar with the early history and the formation of Panagra?

A. I know the early history through Docket 779.

Q. You were not one of the 12 young men that founded Pan American; is that right?

A. I was a young man and joined Pan American after college, poor.

[fol. 488a] Q. Do you know anything of the territorial arrangement which was agreed upon between Grace and Pan American prior to the formation of Panagra?

A. Just what I know about what the objective of Panagra

was to be which was to operate a connecting line between the Canal Zone and Buenos Aires.

[fol. 489] Q. Do you know anything —

A. It was to be to operate a connecting line between the Canal Zone and Buenos Aires.

Q. Do you know anything personally of the arrangement that was made by Grace in Pan American prior to the formation of Panagra?

A. I had nothing to do with the conversations.

Q. You do know that Pan American has always taken the position that there was a division of territory agreement which applies to the situation here?

A. I do know what the objective was in so far as Panagra was concerned, at the time that Panagra was formed.

Q. You also know that Pan American said that it wouldn't apply for routes on the west coast to South America prior to the time this case was filed, don't you?

Mr. Mallory: Could I have that question again, please?

(Question read.)

A. No, I do not know.

Q. You know nothing of the agreement on the division of territories between the parties of this case, Mr. Ferguson?

[fol. 490] A. I know what I learned in Docket 779. First-hand information with regard to the division of territories, I do not know.

Q. Well, you say what you learned in Docket 779; did you read Docket 779?

A. I listened to most of it.

Q. Well, didn't you hear the terms "spheres of operation" and "division of territories" mentioned in that hearing?

A. My primary memory of the purpose of Panagra was described in the history of the formation of Panagra.

Q. Well, don't you know, as a matter of fact, Mr. Ferguson, from listening to Docket 779, that there was an agreement between Pan American and Grace, that Panagra would operate down the west coast of South America and Pan American would operate down the east coast of South America?

Mr. Peck: I think, your Honor, I will object to this. I don't think it is proper cross-examination. I didn't ask him anything about any agreements. I don't object to having the witness testify to what he knows about something, but he has told us what he knows, and I think that there is no purpose to be served by continuing to cross-examine the witness about agreements which he has no [fol. 491] firsthand knowledge of, and which I didn't ask him anything about.

The Court: That doesn't limit the Government in its cross, because you didn't ask him. But perhaps it might cause the Government to ask the question differently. However, I will allow it.

Mr. Kenney: Thank you, sir.

Q. Now, will you answer the question if you can, Mr. Ferguson?

Mr. Kenney: Would you read the question to him?

(Question read.)

A. As to firsthand knowledge, I do not know of such an agreement.

Q. There would be others in your company who would know more about that; isn't that right, sir?

A. I am sure there are.

Q. Now, if Panagra had been allowed to fly from Rio to Lima and Lima to Rio wouldn't that have put it in a competitive position with Pan American for Rio traffic?

A. To the extent that it was competitive, yes.

Q. And we can agree certainly that during the years, if Panagra had been allowed to fly under its own certificate [fol. 492] from the Canal Zone to Miami, there would have been a good bit of competition between Pan American and Panagra.

A. Oh, no, there wouldn't have been much competition at all, because Pan American—

Q. You mean Pan American would have gone out of business.

A. —Pan American would have gone out of business on the route.

Q. So the competitive situation thus created would have put it out of business?

A. Would have put it out of business, and instead of making more competition, would make less, unless we are certificated on the west coast.

Q. Well, the Civil Aeronautics Board pretty much decides the route pattern and thinness of the market, doesn't it, sir?

A. Oh, yes, certainly does.

Q. Now in the latter part of 1956, isn't it true that Panagra wished to obtain a certificate under its own name to fly to the West Coast of California?

A. In the latter part of 1956?

Q. That is correct.

[fol. 493] A. I can't remember whether they filed an application or not.

Q. Well, I am asking you, sir, if you know whether they expressed this wish to Pan American?

A. Well, I think they made a management study, which indicated that they had an interest in the route, yes.

Q. Do you know whether Pan American flatly refused to join the Grace directors in enabling Panagra to serve this part of the country?

A. Well, I think if they had, application would have been filed.

Q. And it hasn't been?

A. It has not been filed.

Q. Now, if Panagra were to fly to the west coast of California, say to San Francisco and Los Angeles, wouldn't that also put it in competition with Pan American?

A. Very much so.

Q. Now isn't it true, Mr. Ferguson, that Pan American is soon going to inaugurate a direct service from New York-Caracas-Buenos Aires?

A. We hope to do—

Mr. Peck: Can we get that question again? Would you give me the question, please?

[fol. 494]. (Question read.)

A. We hope to do so by Asuncion.

Q. That would be by jet?

A. That's right.

Q. Now, will that route to be operated in that way make you nearer on a route mileage basis to Buenos Aires than Panagra is with its route down the west coast?

A. I don't believe it will. I think it would make it just about equal.

Q. It certainly won't be any longer, will it, Mr. Ferguson?

A. No, I think it will probably take up the slack in the differential between the present routings. On the other hand, my memory is that it is about two or three hundred miles involved. I think it would still be a mileage advantage via the west coast.

Q. I think you might find that it would be even a little shorter in mileage, operating that route. Now, I might be wrong about that. But in any case, the problem of Panagra having the shorter route will no longer be such a problem, will it?

A. Well, I don't, I don't frankly think that since the operation out of New York in 1955 that it really has created very much of a problem.

Q. Well, I understood you to say that one of the selling points on the Panagra route was that it was shorter?

A. Well, that is from all areas of the United States except in the case of New York, where the mileage differential is small enough that it doesn't make too much difference.

Q. It won't make much difference at all under this route, will it?

A. I don't think it will. I think we'd have pretty equal routes as far as BA is concerned, which is what seems to be so important here.

Q. Now, Mr. Ferguson, in mentioning statistics, you used the months of March and September; are those representative months?

A. I think they are.

Q. Now, Panagra has not always been happy in the past with Pan American's conduct and efforts in the sale of its tickets and its advertising, have they, sir?

A. There have been, I presume, some kicks about the Pan American service; on the other hand, it seems to me that certainly in the last eight or ten years that we [fol. 496] have had very few problems in so far as—

Q. Well, we have a number of letters in the record here.

sir, that indicate in 1949-1950 there were still a number of complaints?

A. Well, let's take the nine years then.

Q. You say the situation no longer exists?

A. I don't think so. I think there are always differences between two partners, there is no question about that, and they are small in most cases.

Q. They are small?

A. Yes, I think they are small.

Q. These differences haven't let up much, have they, over a period of some 30 years?

A. Well, we seem to be getting along pretty well with Panagra in our sales effort, for example. I have discussed the matter with our U.S. sales manager, for example, who thinks the thing is running very smoothly, as a matter of fact.

Q. Your manager does?

A. Our manager, and he ought to know if there are complaints. We have a completely cooperative arrangement in so far as sales are concerned, where the Panagra sales people cooperate completely with the Pan American sales [fol. 497] people in the various districts over the country. They go together to call on agents, to set forth the various advantages of service, and that sort of thing, and I think as far as advertising is concerned, that there were some problems with regard to that. It is certainly my impression that the advertising programs, which are in some cases joint, and in some cases entirely separate programs, are going along very well.

Q. Panagra still doesn't have its own advertising under its control, does it? Pan American—

A. Oh, certainly does.

Q. Isn't Pan American the representative in this country that handles Panagra's advertising?

A. Panagra has perfect freedom in its advertising program. It can put as much advertising in papers or magazines as it pleases. That is up to their board of directors as to what they spend. As far as joint advertising is concerned, it is always on the basis of an agreement on the advertising to be done, and the costs are split on a reasonable basis between the two carriers.

Q. Now, I think you testified that Panagra presently had its own representatives in this country selling passages over [fol. 498] Panagra?

A. That is correct.

Q. Now, when a Panagra representative here sells a passage over his line, does Pan American get a commission on that sale?

A. That's right. We are the general agents for Panagra. As a matter of fact, as far as the Panagra representative actually making the sale is concerned, I don't believe that is quite the picture. The sales effort is almost entirely as between the passengers and Panagra—between Pan American and the passenger. The staff of Panagra is the staff which is promoting Panagra in Pan American's offices and with agents.

Q. Mr. Ferguson, I believe you testified at some length about the thinness of the market; are you familiar at all with the Board's decision in Docket 4882, the so-called Balboa Through Flight proceedings?

A. Yes, generally.

Q. Are you familiar with the fact that in that decision, which was issued in 1955, the Board stated that "The Latin America area is today the largest foreign air transportation market to which American flight carriers have access"?

A. No. I think you are relating my testimony, however, [fol. 499] to a period which is not being discussed in Docket 4882.

Q. Well, I was asking you, sir, if you were familiar with the fact that the Board so stated its decision, in its opinion, in Docket 4882?

A. And what was the quotation?

Q. "The Latin American area is today the largest foreign air transportation market to which American flight carriers have access."

A. I wonder if they would say it today?

Q. Well, they said, "Moreover, it is a market which has expanded tremendously in the past and which may be expected to continue to grow in the immediate as well as the more distant future."

A. Well, I can say it hasn't, it hasn't grown any more near, at anywhere near the rate where other areas have, such as your trans-Atlantic, trans-Pacific.

Q. You are familiar with the fact that the Board put Braniff down there in 1946, aren't you, sir?

A. Oh, yes, I am very familiar with that fact. But I also say that I don't think there is an area in the world where the competition is so keen as it is in the Latin American area.

[fol. 500] Q. Well, let's see how Pan American got started in the Latin-American area. I think you testified at some length about the fact that Panagra had to have a subsidy to get started down there. Pan American didn't make any money without mail pay in the early years either, did it?

A. Oh, it certainly has not. ~~It~~ hasn't made any money with mail pay either.

Q. As a practical matter, don't they all get mail pay?

A. No, not without subsidy.

Q. Isn't mail pay a form of subsidy?

A. It is not. It is compensation for doing a service.

Q. Doesn't the Civil Aeronautics Board look upon mail pay as a form of subsidy, to your knowledge?

A. It certainly does not.

Q. Are you saying that they only actually get paid for the mail they carry?

A. That's what some people get. Other people get subsidy which is identified as such.

Q. Does Braniff get subsidy?

A. Yes.

[fol. 501] Q. In addition to its air mail pay?

A. That's right.

Q. Does it today?

A. I think you will find, if you look at the Board's estimate of subsidy requirements for international carriers, that there is only one there and that is Braniff.

Q. Panagra has requested a subsidy; is that right?

A. That's correct; and so have we.

Q. And so has Pan American. Now, this through-service agreement or the through service that you talked about was approved by the Board in 1946, wasn't it?

A. That's correct.

Q. Are you familiar with that proceeding? I think I asked you that before and you said no.

A. Yes, I participated in those proceedings.

Q. You did participate?

A. That is right.

Q. You know, don't you, that the Board approves these things at certain periods of time; approves this through-flight agreement?

[fol. 502] A. I don't remember what the approvals were. It seems to me that the first one was for three years or something like that, and then it was extended.

Q. Don't you know that the last one was until 1960 or the conclusion of this case?

A. I don't remember the terms of the approval.

Q. You do know that the Board keeps some sort of control over this through-flight agreement.

A. Well, if you mean control by being able to bring it up for approval again, why, I suppose that's right.

Q. They have to approve it from time to time; is that right?

A. That's right.

Q. Do you know anything about the 1939 agreement between Grace and Pan American and Panagra?

A. Only the fact that at that time it was determined that one of the Grace directors would become the president of Panagra.

Q. Do you know whether it is your company's position that that particular agreement ratified the understanding on the division of territories?

A. No, I do not.

Q. At the time that Panagra wished to fly from Lima [fol. 503] to Rio, Panair do Brasil was not operating the route, was it?

A. As I remember it, they started the operation in '51 and then suspended, and then reinstituted it in '54.

Q. They were not doing it in 1949, were they, sir?

A. No.

Q. Or in 1950?

A. I don't think they were, no.

Q. You spoke of some difficulty with regard to Brazil. Could you tell me again what you meant by that, sir?

A. Yes. The United States has a bilateral agreement with Brazil which provides for the operation of United States flag carriers and Brazilian carriers between Brazil

and the United States. Under that agreement there are certain provisions whereby a carrier is not permitted to operate what might be considered excess capacity which would injure the airline—the national airline of the second party to the agreement, which in this case would be Brazil.

We had been operating twice daily with DC-3s and then had cut back to a DC-4 service which we had in what we [fol. 504] called a sleeperette configuration which provided for some 30 to 35 seats on a DC-4 airplane at first-class fares. We also operated those flights south of Rio in which case we picked up what might be called third-country traffic, in other words, traffic that originated in Brazil, and carried it to Buenos Aires.

The Brazilians felt that we were offering and carrying more of that type of traffic than we should carry, so they put a limitation on us both north of Rio and south of Rio as to the number of seats which we could offer for sale. This has been—this restriction has been in effect ever since, and we are limited by that.

Q. Will this new direct flight, New York, Caracas, Asuncion, Buenos Aires, help you in that respect?

A. Well, it is an improvement in service. As far as we are concerned, we will have an improvement of service when the jets are in operation, and by the same token so will Panagra when they get their jets in operation, which should be some time in 1960.

The Court: What counsel meant was you wouldn't be limited by this Brazilian limitation for the simple reason [fol. 505] that you wouldn't be stopping there.

The Witness: We would be by-passing Brazil.

Mr. Kenney: That is what I was about to ask.

The Court: Would this be a convenient time to adjourn?



[fol. 506]

New York, May 19, 1959,
10.30 a.m.

R. G. FERGUSON, resumed.

(Cross examination (continued)).

By Mr. Kenney:

Q. Mr. Ferguson, as the treasurer of Pan American you are the chief fiscal officer of that company; is that not right, sir?

A. That's correct.

Q. As I recall your testimony yesterday, you stated that approximately 54 per cent of the traffic between the United States and Buenos Aires originating and terminating in the Northeastern part of the United States—that that percentage is correct; is that right, sir? 54 per cent?

[fol. 507] A. Yes.

Q. Now, could you tell us what percentage of Pan American and Panagra's participation originates in the Northeastern part of the United States?

A. I don't think I have that figure.

Q. Would the figure 90 per cent seem high to you?

A. I would think that would be quite high.

Q. Well, it is a much higher figure than 54 per cent, is it not, sir?

A. I think that the 54 per cent as a figure is representative in so far as all American carriers are concerned.

Q. That's right. But I am asking you now about Pan American and Panagra.

A. Well, I have no basis for stating that the amount of the traffic would be any different there than any place else.

Q. Well, isn't it a fact that at the present time Panagra has 11 weekly flights from New York to Buenos Aires?

A. Yes, sir.

Q. And Pan American has six?

[fol. 508] A. That's correct.

Q. And Braniff has one?

A. To Buenos Aires?

Q. One.

A. I thought they had more than that to B.A.

Q. Well, a Panagra exhibit which shows the operations of the various airlines operating between New York and Buenos Aires as of April, 1959, says that Braniff has one. This is Panagra Exhibit 194.

A. I am not familiar with the exhibit.

Q. And certain other foreign airlines also have a couple of weekly flights, do they not?

A. Yes, Aerolineas has, I think, two flights or three flights; I am not sure. Real—VARIG, rather, has flights down the East Coast, as does Aerolineas and—

Q. Transcontinental?

A. Transcontinental and Real and the other Brazilian airline which operates into Miami.

Q. Aerovias Peruvianas?

A. Well, I only know it as Real.

Q. And LAN, L-A-N?

A. I'm not sure about that.

Q. Well, you are not sure either that the figure 54 per [fol. 509] cent reflects the actual percentage of passengers carried by Pan American and Panagra from the Northeastern part of this country, are you, sir?

A. I am referring to the percentage of the traffic carried as shown in the CAB reports.

Q. And that is 54 per cent by all lines?

A. It is the American carriers.

[fol. 510] Q. Mr. Ferguson, as I recall your testimony yesterday, you spoke, I think, of 40 per cent of the Pan American and Panagra passengers being stopover passengers; is that right?

A. That's correct.

Q. Now, that is an assumption on your part, isn't it, sir?

A. Well, it is an assumption which is supported by what happens in other parts of the country, and the only basis on which we can determine why passengers use various routes is the basis that, if they wanted just to go straight to B.A. by the shortest distance in the best time, take, for example, the point San Francisco and Los Angeles, they could [fol. 511] have done it without using the East Coast, for example, and we therefore assume that the 40 per cent of the traffic does select the East Coast or West Coast because of their desires for stopovers.

Q. I didn't interrupt you, Mr. Ferguson, but the fact remains that you have never made a survey to determine this, have you?

A. You mean by asking the passengers?

Q. That's right.

A. No, we have not.

Q. And so it is an assumption on your part?

A. It is an assumption which is based on fact.

[fol. 514] Q. Now, as chief fiscal officer of Pan American, you would obviously prefer for your passengers to use Pan American all the way, wouldn't you, sir?

A. Well, to the extent that they do, why, we are better off, of course.

Q. Well, wouldn't any loyal employee of Pan American want the company to receive the full fare?

A. Not necessarily.

Q. You don't think so?

A. No. I think he wants to sell what the passenger wants. In any public service, that is the way it is done.

[fol. 515] Q. You don't think that Pan American employees would be loyal enough to the company to want to realize all the money the company could for the company; is that right, sir?

A. Well, it is all the money it could. We also have an interest, as you may know, in Panagra.

Q. Yes, I have just explained that interest. You get a percentage of the fares over Panagra's lines, but you get the full fare over your line; is that right, sir?

A. Well, I don't think you are saying it right. Pan American, directly, for the service which it renders, would receive its share of a round South American fare for service rendered between New York and BA. It would also receive directly its fair share of the fare from BA to New York via the west coast over the Miami-Canal Zone sector. That is for service rendered.

Q. Yes, I understand that.

A. We also have an interest in Panagra as such, a one-half interest.

Q. Right.

A. It is not a hundred per cent interest.

Q. That's right.

[fol. 516] A. It is a one-half interest. So that we do have an interest—

Q. In fact—

A. —we do have an interest also in what happens as far as Panagra is concerned.

Q. Well, I don't want to go all over this again, but the fact is that Pan American makes more money when a passenger travels on its line all the way to Buenos Aires and back than it does when he goes one way on Pan American and comes back on Panagra; is that right?

A. I think that is axiomatic.

Q. And the same thing is true when you can persuade him to come down the east coast and fly back the east coast, you get the whole income; is that right, sir?

A. That is exactly the same question.

Q. And your answer is the same.

A. That's right.

Q. It is axiomatic. Now, Mr. Ferguson, does Pan American engage in publicity efforts to sell passengers on the idea that an air trip is more pleasant than a sea trip?

A. Oh, I am sure we do.

[fol. 517] Q. Pan American goes to Buenos Aires and Rio de Janeiro; is that not right?

A. That is correct.

Q. And certain steamship companies also go to these points.

A. Yes.

Q. Do you consider that Pan American is in competition with these steamship lines?

A. Very definitely. We are both trying to get the same market.

Q. Would you also apply that thinking to Europe?

A. Oh, yes.

Q. Even more so?

A. No, I think the situation is about the same.

Q. You definitely consider that you compete with steamship lines in the routes.

A. Certainly do.

Mr. Kenney: That is all.

Cross examination.

By Mr. McKay:

[fol. 518] Q. Mr. Ferguson, as an expert in this airline business, you recognize, do you not, that one carrier service is to the advantage of the public and to the carrier itself?

A. There is no question about that.

Q. And you recognize also, Mr. Ferguson that an interchange is a poor substitute for one carrier service, do you not?

A. Well, let's say it's a substitute.

Q. It is not as good as the one through plane service?

[fol. 519] A. Well, I would say—

Q. One carrier service?

A. I would say it is the next best, and if the two parties to the interchange do a good job, they can supply quite good service all the way through.

Q. There is no question in your mind though, as far as your company is concerned, if you were offered your own route you would prefer that to an interchange.

A. I think that is correct.

Q. Are you familiar, Mr. Ferguson, with Pan American's application to come from its present terminal in Los Angeles or San Francisco into New York and the mid-western cities, in order to serve Tokyo and the Far East?

A. Yes, I am. Not, I think—

Q. Generally.

A. I think the application is to come into New York for Tokyo service.

Q. You are familiar also, are you not, that domestic carriers, flying across the United States, oppose the Pan American's application?

[fol. 520] A. They will oppose it, I think. I think that the opposition, in so far as the American carriers, however, would be primarily based on the scope of the proceeding, and I think the primary problem in so far as the American carriers are concerned is whether or not Honolulu as such will be excluded in the case.

Q. But you are familiar with the fact that Pan American

has an application to extend its present route from the Far East to the western coast of the United States.

A. That is correct.

Q. To the eastern coast.

A. In order to compete with Northwest Airlines.

Q. Pan American, if it gets that application approved, will be taking business away from United and TWA, and so forth, that fly from New York to California, would it not?

A. There might be some diversion, yes.

Q. Well, if someone wants to go to Tokyo, you say there might be some; there will be some, will there not?

A. There will be diversion to the extent that Pan American takes connecting traffic from the eastern part of the [fol. 521] United States.

Q. And you will be taking that connecting traffic, will you not, Mr. Ferguson?

A. I hope so, if we get the route.

Q. That is the whole purpose of the application, is it not?

A. In order—no, the purpose of the application is in order to provide the subject with good service.

Q. And to make money for Pan American?

A. That's right.

Q. Would you say that the present pattern, air pattern now, where a passenger leaving New York and wanted to go to Tokyo on Pan American, has to take a United or TWA plane to the coast, then trans planes on to Pan American, that that is an antiquated route pattern?

A. I think it is antiquated, and I think it will become more so when the jets come into the picture.

[fol. 522] Q. Do you know whether Panagra has jets in order?

A. Yes, they do.

Q. When do they get delivery of those jets, Mr. Ferguson?

A. My recollection is that it will be some time in 1960.

Q. Do you know whether Panagra has plans or intends to fly non-stop New York to Lima?

A. No, I do not of my personal knowledge.

Q. To get the best utilization out of a jet plane it would be desirable to fly non-stop, would it not, New York to Balboa, overfly Miami, say?

A. Yes, I think probably that is true. I think even on an interchange that could be arranged.

Q. But as you said previously, Mr. Ferguson, an interchange is not as desirable as one's own route.

A. Well, when you get into situations—

Q. Yes or no, Mr. Ferguson. If you cannot answer that yes or no, I will go to another question. Did you so testify? The answer is either yes or no.

A. Yes, I did testify.

Q. That is all. Mr. Ferguson, on direct I believe you [fol. 523] testified that prior to the Civil Aeronautics Act, which went in in 1938, subsidy was in the form of 10-year contracts awarded by the Post Office.

A. That's correct.

Q. And it was a policy of the Post Office at that time not to subsidize, if you will, to competing carriers along the same route?

A. That's correct.

Q. And then in 1938 under the Civil Aeronautics Act the CAB obtained jurisdiction over subsidies and it was within their discretion as to whether there should be one or more carriers on the same route.

A. That's correct.

Q. And isn't it true in 1946 the Civil Aeronautics Board awarded a fairly heavy subsidy to Braniff, paralleling Panagra's route in the main?

A. Yes, they did. That was a Presidential decision, not the Civil Aeronautics Board, as I remember it.

Q. Let us say the Government.

A. The Government. There are many times when, if I may complete my answer, the President, who has the final say in matters of this kind, may make decisions not based on economics but on political situations.

[fol. 524] Q. The fact is that a parallel carrier was authorized under the law?

A. That is true, but certainly not from an economic point of view.

Redirect examination.

By Mr. Peck:

Q. Mr. Ferguson, I would like to clear up one thing in your testimony from yesterday. We had some discussion of a 4,000 figure, you remember, as the number of passengers which were exchanged each way between Pan American and Panagra at Balboa, and there was some question as to just what that 4,000 was, whether it was all the passengers coming into Balboa from Pan American and all the passengers going into Balboa from Panagra or something less than that.

Now, would you tell us precisely and exactly what that 4,000 figure is?

A. Yes. If you remember my testimony, I was describing [fol. 525] the route structure of Pan American as such, and my first description was the description of the route connecting Balboa with Miami, Miami-Balboa. I then went on to describe the routes other than the Miami-Balboa route which feed into Balboa as such.

The figure of 4,000 passengers is the figure of the number of passengers brought into Balboa and delivered to Panagra on all routes except the Miami-Balboa route, and the points of origin of those passengers were the points that I had described in my testimony in describing the routes, including traffic from the West Coast of the United States, from Central America and Mexico, through the Houston route to Balboa, through the New Orleans route to Balboa, the route from across the North Coast into Balboa, and the routes via Kingston into Balboa.

Q. But not passengers coming over the Miami-Balboa circuit?

A. That's correct.

Q. Which would be many times 4,000 passengers a year?

A. That's correct.

Q. I want to get perfectly clear for the Court, Mr. [fol. 526] Ferguson, the IATA procedures—this is a matter of law, I guess, but you can sufficiently confirm it—that under Section 412 of the Civil Aeronautics Act the air lines are authorized within the IATA conference to agree

upon rate schedules subject to the submission to and approval of the Civil Aeronautics Board; is that correct?

A. That is correct.

Q. And the carriers do gather in these conferences and establish rates; is that correct?

A. They do, which are subject to approval of all of the governments which have airlines participating in IATA.

Q. And the decisions of IATA in that respect are incorporated in formal public resolutions?

A. They are.

Q. And those resolutions are submitted to the Civil Aeronautics Board?

A. They are.

Q. And approved, if they are approved?

A. And approved or disapproved.

Q. And, if they are not approved, they are washed out?

A. They are.

[fol. 527] Q. And, if they are approved, they become effective and official?

A. That's correct.

Q. Mr. Kenney asked you about any preliminary conferences between carriers in advance of an IATA conference, and you answered him that there were not preliminary consultations between the carriers; is that correct?

A. That's correct.

Q. Again I want to be precise about it. However, there are consultations, are there not, before an IATA conference between the carriers and the Civil Aeronautics Board, in other words, an around-the-table discussion of matters to come up at the conference with officials of the CAB?

A. That's correct. Prior to—let me start again. In recent years the Civil Aeronautics Board has adopted the practice of calling the American carriers to a conference with the—normally it is with a member of the Board and staff, to discuss the positions which the American carriers will take at the conferences. In recent years—well, as a matter of fact, from the beginning—Pan American has been a champion of low rates. We sponsored the tourist [fol. 528] rates in IATA trans-Atlantic. We then sponsored the economy class rates which were even lower than the tourist rates. These matters were discussed with the

Civil Aeronautics Board prior to our making these proposals, and with their agreement and concurrence we promoted within IATA the adoption of such rates.

There may be other matters such as the level of cargo rates which will be discussed with the Board. They are normally matters of position to be taken rather than that the rates shall be X dollars. On the other hand, there have been cases where the Civil Aeronautics Board has indicated the level which rates should take.

Mr. Peck: Might I call your Honor's attention in this connection just to typical extracts of certain exhibits in evidence, Pan American's Exhibits 308, 309 and 314?

I would like to just read to your Honor a few sentences in this connection.

Exhibit 308 is a communication from the chairman of the Civil Aeronautics Board to Mr. Trippe of May 4, 1951, which says:

"Dear Mr. Trippe: On April 4, 1951 a meeting was [fol. 529] held between the Board staff and the United States members of the IATA in order to ascertain the positions of the carriers with respect to agreements to be reached at IATA traffic conference meetings beginning May 6 in Bermuda. The Board has carefully considered the position of the carriers, the data bearing upon these positions, and their relationship both to the sound economic development of international air transportation and the level of mail pay requirements.

"Keeping in mind the objective of building a rate structure which will contribute most substantially to a prosperous industry through the broadening of the air traffic base and the maximizing of carrier revenues, the Board offers the following as its suggestions for the guidance of the U. S. flag carriers in the forthcoming IATA discussions," and then proceeds to discuss it.

November 9, 1951, in Pan American's Exhibit 309, from the chairman of the Board to Mr. Trippe:

"On November 9 the Board sent you a statement of its [fol. 530] position regarding the issues expected to arise at the Nice meeting of the IATA rate conference. In view of the great importance of the specific North Atlantic issues and the extended controversy that these have engen-

dered in the past the Board deems it of the highest importance that the two United States carriers primarily involved in this area work closely together to obtain conference agreement on these issues. Only through the closest cooperation between the United States carriers will it be possible to successfully achieve the necessary support for the United States position as stated in the Board's letter of November 9."

And Exhibit 314 of May 16, 1956, from the chairman of the Board to Mr. Lipscomb, vice president of Pan American:

"A meeting was held between the Board and the United States carrier members of IATA on April 17, 1958, at which the carriers presented their respective positions concerning various issues which are to be considered at the forthcoming IATA conference in Cannes. The Board under [fol. 531] stands that the United States carriers will support its position in their negotiations within IATA."

OFFERS IN EVIDENCE

By Mr. Peck:

Q. I hand you a document under the heading "International Air Transportation Association" and ask you as to whether that is a typical minute of an IATA conference.

A. I am sure it is.

Mr. Peck: We offer it in evidence, please.

Mr. Kenney: Would it be possible to get a copy of this, Judge Peck?

Mr. Peck: The answer is yes.

The Court: What number do you suggest for this?

Mr. Peck: 428, if you please.

(Marked Pan American Exhibit 428 in evidence.)

[fol. 532] Mr. Kiernan: If your Honor please, may we arrange to substitute a copy? That document came out of our files, and we would like to substitute a copy for the original.

The Court: All right.

By Mr. Peck:

Q. In order that we may have in the record a sample copy of an order of the Board on IATA proceeding, would you identify this document as such an order?

A. This is order serial No. E5623, adopted by the Civil Aeronautics Board on August 17, 1951. The order is with regard to resolutions which were adopted by IATA.

Mr. Peck: I offer it in evidence.

This, I understand, approves the fixing of rates between the United States and various South American countries. I understand that this is connected with the previous exhibit as being the order which approves the rates reached at the conference, of which the minutes are Pan American Exhibit 428.

That will be 429.

(Pan American Exhibit 429 received in evidence.)

Q. Now, Mr. Kenney asked you, at page 482 of the min-[fol. 533] utes, yesterday, as to whether you knew whether in 1953 Aerolineas Argentinas was a IATA carrier, and you said you did not know. Have you looked it up overnight to see whether or not Aerolineas Argentinas was a IATA carrier in 1953?

A. Yes, they were. As a matter of fact, they have been members of the IATA since at least 1947.

Q. And he asked you whether you knew that Pan American had a rate agreement with Aerolineas Argentinas, and you said you did not know.

Mr. Kenney: I don't believe I asked him that, sir, did I?

Mr. Peck: Well, page 482, yes, you said:

"Do you know that Pan American had a rate agreement with them?"

"A. No, I do not."

"Q. You do not know that?"

"A. No."

Q. Will you tell us what you know this morning on the subject?

A. Yes. We reviewed the situation in Argentina, and

also the IATA resolutions which have to do with rates of exchange. In traffic conference No. 1, which represents the whole western hemisphere, including North and South [fol. 534] America, rates are quoted for all countries in terms of dollars. In selling in foreign countries, however, the sales may be made in terms of local currency. In the case which I believe Mr. Kenney is talking about, we had a problem, because—

Mr. Peck: Well, in order that we will know exactly what we have assumed Mr. Kenney was talking about, it is Government's Exhibit—

Mr. Kenney: 666.

Mr. Peck: Is that what this is?

Mr. Kenney: Yes.

Mr. Peck: Yes, Mr. Kenney is good enough to confirm that we were right in our supposition as to what he was talking about, which is Government's Exhibit 666, which is a memorandum from Mr. Juan Homs.

Q. Where was he, from the Latin American Division of Pan American?

A. That is correct.

Mr. Peck: (Continuing) To the division traffic sales manager, and he had this to say, under date of March, 1951:

"Negotiations to induce Aerolineas to raise their tariffs to the level of Pan American Airways has been successful, [fol. 535] and as from the beginning of March we have equal rates. Formerly they were using 9.02 pesos per dollar rate against our 14.03 pesos per dollar. In this case we are regaining a number of lost clients."

Q. Now, will you explain this exhibit in reference to the IATA proceedings?

A. Yes. Under IATA resolutions, as I stated, all rates are in terms of dollars. At the conferences—and specifically I will talk about 1951—the rates for local currency purchase of tickets, which are normally stated in dollars, are set forth. However, if due to changes in the rate of exchange of local currency to dollars, and assume, for ex-

ample, that the rate went from 9.02 to 14 pesos to the dollar, the IATA resolutions provide for the carriers who are serving that particular country to get together and determine what change should be made in that local currency rate. There should be unanimous agreement.

However, it always—not always happens, and in this case all of the carriers, except Aerolineas, who was a member of IATA, agreed to increase the rate from 9 to 14 pesos to the dollar. Now, there would be no reason in the world why we shouldn't continue to work with Aerolineas to ask them to get in line in so far as their sales are concerned, and to come up to meet the rates which all other IATA carriers were charging.

The purpose, the whole purpose of IATA as such, is to provide an orderly manner of developing business for all carriers in IATA, and if we had, everybody had different rates for the same service, the thing would eventually turn into chaos and nobody would make any money, and we would find a very unhealthy industry. So that there was nothing out of line here. This was done under the resolutions of IATA, to try and get agreement between the carriers who were serving that country with regard to that rate.

Q. I asked you—

A. May I finish?

Q. Pardon me. I am sorry.

A. I might say this is not a single instance. The situation in Brazil has been fantastic. The rates in the last three or four years—

Mr. Kenney: Well, now, your Honor, we were talking about Argentina, and now we have gotten to Brazil.

Mr. Peck: All right, we won't have him go to Brazil.

A. (Continuing) All I wanted to do is to show that this [fol. 537] is not a specific instance.

Mr. Kenney: We would be glad to have more instances of it if you have them, sir.

The Witness: Well—

Mr. Kenney: I mean in writing, like the one we have here.

The Witness: I don't have any on hand.

By Mr. Peck:

Q. Mr. Ferguson, you were asked yesterday about the Grace suggestions of a Lima-Rio route for Panagra; when was that suggestion made, according to your knowledge?

A. To my recollection it was '49 or '50.

Q. Do you have any recollection of any renewal of that suggestion within the last several years?

A. I have not any information with regard to it.

Q. Would you have been likely to hear of it if there had been such a suggestion?

A. I think so.

Q. Was an application for such a route included in the application filed by Grace in CAB Docket 8511, in the year 1957?

A. No, it would not.

Q. You were asked something this morning about the west coast route coming east; how long has Pan American [fol. 538] been operating its service out of the California gateway to the Canal Zone?

A. I think since 1948.

Q. Since when?

A. 1948.

Q. What is the current frequency of that service?

A. We operate five times a week.

Q. Have you ever considered operating more often than that?

A. Yes. As a matter of fact, we would like to have a daily service.

Q. Why don't you have a daily service?

A. Just because there isn't enough traffic to justify it.

Q. I want to touch for a moment on an interchange, raised by Mr. McKay. It is quite obvious, as he pointed out, that an interchange doesn't produce as much revenue for a carrier as having its own route all the way, but I want to ask you about the passenger. So long as a passenger is getting upon an airplane at one point and going to his destination on the same plane, does he care whether it is an interchange, a through flight or a single route, the passenger now?

A. No, if the personnel on board remain the same, and [fol. 539] so on.

Mr. Peck: Pardon me for just a moment.

Q. Has there been any discussion at any time between the domestic carriers, going to the west coast, and Pan American about any interchange arrangements between the Pan American Pacific flights and the domestic carriers' American flights?

A. I do not know of my own knowledge of any.

Q. So far, as you know, the subject hasn't come up?

A. That is correct.

Mr. Peck: That is all.

[fol. 554] Redirect examination.

By Mr. Peck:

Q. Mr. Ferguson, this agreement or discussion between representatives of Pan American and Aerolineas Argentinas in 1951, was that part of an IATA conference?

A. Well, it is part of the IATA procedures, and it is perfectly normal for carriers serving a particular country [fol. 555] where there has been a substantial change—as a matter of fact, the IATA resolutions say that if there is a 5 per cent change in the exchange rates that they can get together and unanimously decide to adopt a new rate of exchange.

In Brazil in the last two or three years the matter has been a very serious one with the exchange rates changing from somewhere around 25 and a fraction up to 170 to the dollar—cruzeiros to the dollar, and actually the meetings of the group serving Rio have been practically monthly in order to keep the rates in line with the change in the rate of exchange, and, as I said before, in so far as Aerolineas was concerned, they did not go along and there was no unanimous action taken. All other carriers did go along with raising the exchange rate from the 9.02 which was the

rate at the time of the resolutions to the 14 and a fraction pesos.

Mr. Peck: All right.

Mr. McKay: I have but one brief question, your Honor.

Recross examination.

By Mr. McKay:

Q. Mr. Ferguson, one of the exhibits that you sponsored, [fol. 556] Pan American Exhibit PS-7, which shows the average passenger load per plane-mile flown on Panagra's route, that was a period up to 1945; and Exhibit PS-9, that was a period up to 1945, as well as PS-11. Would you please tell me why the exhibits terminate with the year 1945, if you know?

A. My testimony has been primarily covering the period up to the end of the war and the early developments. I believe that the exhibits of Professor Cherington will cover the period beyond that.

Q. Beyond '45?

A. Yes. I may be mistaken about that, but I think they will.

[fol. 560] Redirect examination.

By Mr. Peck:

Q. Mr. Kenney asked you about the percentage of Pan American-Panagra traffic to Buenos Aires which originated in the northeast part of the United States. You said when you were on the stand that you couldn't supply that information. Have you checked up on it during the recess?

A. Yes, I have.

Q. What is that percentage, please?

A. The percentage is 57 per cent.

[fol. 563] PAUL W. CHERINGTON, called as a witness on behalf of the defendant Pan American, having been duly sworn, testified as follows:

Direct examination.

By Mr. Peck:

Q. Professor Cherington, what is your occupation?

[fol. 564] **A.** I am a professor of business administration at the Harvard Business School, and I am also a director and consultant to United Research, Incorporated, Cambridge, Massachusetts.

Q. What degrees do you hold?

A. I hold a BS from Harvard, and a Doctor of Business Administration from the Harvard Business School.

Q. Do you have some particular area of specialization?

A. I do. I specialize in transportation, air transportation in particular, and the area of business and government.

Q. And how long have you specialized in that field?

A. Well, including time as a graduate student, approximately 20 years.

Q. Have you written for any professional publications in this field?

A. Yes. I published a book on airline price policy, a report on the status of the financing program for the airline jet aircraft, and I was editor of a study on Air Force logistics, general supervisor of a study on international air cargo, and I have written various miscellaneous [fol. 565] articles.

Q. Over what period of time have these been done?

A. Oh, this would be over the last ten years.

Q. What are your duties at Harvard University?

A. Well, my duties are divided approximately equally between research and the area of aviation and air transportation and teaching, either in the area of business and government, or in the area of transportation.

Q. And what is your connection with United Research?

A. I am a director of United Research and a consultant on a continuing basis and a part owner.

Q. Tell us what is United Research?

A. United Research is a group of approximately 50 people in Cambridge, which specializes in economic research and technical research in the instrumentation area. It draws some of its professional staff on a consulting basis from either Harvard University or Massachusetts Institute of Technology, and it is a successor organization to the Aeronautical Research Foundation.

Q. Have you personally conducted studies in the field [fol. 566] of air transportation?

A. Yes, sir.

Q. And has United Research, while you have been associated with it, conducted such studies?

A. Yes, sir.

Q. Will you describe some of the studies which have been made by United Research, of this nature?

A. Well, a good deal of our work is in the air transportation area, and either under United Research or under the Aeronautical Research Foundation. I would say that our principal studies include a fairly extensive study on international air cargo, that Aeronautical Research did for U.S. Air Force. We did a long run forecast for the President's special assistant on aviation facilities, General Curtis, on national aviation activity. We have done, just completed, a fairly detailed study on mail rates for local service carriers. We have done a series of studies for a number of airline or aircraft manufacturing or other industrial clients, having to do with air transportation. We have also done some work in the railroad area.

Q. Could you give us the names of some of the organizations in whose account United Research has prepared [fol. 567] reports or studies in the field of air transportation?

A. In the field—yes, the U.S. Air Force, the U.S. Navy; the Executive Office of the President; ALTA, the local service carrier group; the Air Transport Association; three good sized manufacturing companies, including North American Aviation; a number of airlines, Bonanza, North Central, Allegheny, and of course, Pan American.

Q. Have you testified as an expert witness before?

A. In administrative proceedings at the CAB, yes, sir.

Q. On many occasions, or several occasions?

A. Not many. As I recall, it is either three or four.

Q. Were you requested by Pan American to prepare certain studies in connection with this lawsuit?

A. Yes, sir; we were. We were asked to essentially look at the situation in South America as it was affected by the competitive status there, to make an examination of the strength of the market down there, the operating results in terms of financial return that had been obtained by the [fol. 568] carriers. We were also requested to take a look at the influence of foreign flag carriers on the competitive situation; and finally, we were asked to make two studies in the past decade as to what the South American routes would have looked like under somewhat changed conditions, as to carriers and certifications.

Q. What source material did you have available for these studies, Professor Cherington?

A. Generally speaking, we relied on public sources. These includes the Form 41 reports, filed by our carriers with the Civil Aeronautics Board. These are fairly extensive and elaborate financial, accounting and statistical reports, which show balance sheet information, income statements, various breakdowns by accounts. They also show station analysis and traffic handled at stations, and so on.

We also used the Board's origin and destination traffic surveys, which are, for the period we are dealing with, were made in March and September of each year, except for 1951. We use the official guide for the schedules. We use the Immigration and Naturalization statistics. In some instances we also used the ICAO data. That is the International Civil Aviation traffic data, and in some instances [fol. 569] we relied, we requested information from Pan American, from the Pan American organization.

OFFERS IN EVIDENCE

Q. Have your studies been incorporated into a number of exhibits?

A. Yes, sir. Our studies are incorporated in Exhibits PS-101 through PS-129.

Q. Put together in the folder which I now show you?

A. Yes, sir.

Q. And were these exhibits compiled under your direction?

A. Yes, sir; they were. A great deal of the work on them was done by the staff at United Research, including Mr. Nathan Simat, who is a transportation economist, but under my general direction.

Q. And are the figures from the sources indicated here correct?

A. To the best of my knowledge and belief.

Q. And to the extent that they represent judgment or estimates, do they represent your best judgment as an expert in this field?

A. Yes, sir.

Mr. Peck: I offer them in evidence. The material is in the hands of the Government counsel and other defense [fol. 570] counsel, your Honor, although, as Mr. Kenney said, only recently in their hands.

The Court: Well, he used a different word. He said "last night."

Mr. Kenney: No, yesterday, sir.

Mr. Peck: I think you did have some of it earlier, didn't you, but not all of it?

May I hand one to your Honor?

Let those be marked, if you may, PS-101 through PS-129 marked at your convenience.

(Defendant Pan American Exhibits PS-101 through PS-129 received in evidence.)

By Mr. Peck:

Q. What is the period covered by your study in these exhibits, Professor Cherington?

A. Generally speaking, it is the post-World War II period, from 1947 down to the present time that these were being prepared. 1957 was, generally speaking, the last full year for which data was available.

Q. Now, you have told us, I think, generally, what these studies are, but I'd like to get it sort of 1, 2, 3. Just what are the subjects of this study?

A. The subjects are, in the first instance, in Exhibits 101 to 106, what we call the economic profile of the routes in

[fol. 571] South America, that is, their economic strength in terms of likelihood that they will generate traffic, and these exhibits compare the economic strength of these South American routes and points with other routes and other points elsewhere.

The second set, the second compartment in these exhibits, 107 and 8, show the financial operating results for the three U.S. carriers, Pan American, Panagra and Braniff, in South America, essentially in the post-war period.

The third set of exhibits, Exhibits PS 109 to 113, show the effect of foreign flag competition in the South American markets. The two studies that I made are included in Exhibits PS-114 to 129, and these studies were based on two assumptions, dealing with routes. The first route assumption was that Panagra would have been given and would have operated in the years 1952, and again in 1957 its own route from Balboa into Miami, with essentially the other routes left as they are. The second—and it shows the economic consequences, to the best of our judgment, as to what would have happened under that route assumption.

The second study indicates or assumes that Panagra would have received a route from Balboa into Miami, [fol. 572] and that simultaneously, Pan American would have been given a competitive route down the west coast of South America, paralleling Panagra, and the second—and the economic consequences of that kind of route alteration are also shown in the study.

Q. Now we will come first, then, to your Exhibits 101 to 106 which I believe you said are the economic profile of air transportation on American flag lines between the United States and South America. Correct?

A. Yes, sir. And this set of exhibits here runs from PS-101 to 106. The PS-101—

Q. Have you told us sufficiently what you mean by an economic profile of this route pattern?

A. It is essentially the strength of the routes in terms of traffic.

Q. All right. Now, take up PS-101 and tell us what that exhibit shows and what the figures therein are and indicate.

A. PS-101 compares what we call route density for various classes of operation with the Pan Am, Panagra and

Braniff routes in South America. By route density we mean the number of passenger miles per route mile on a daily [fol. 573] basis. In other words, this is the number of passengers essentially flowing over the route on a daily basis, and it includes traffic both going and coming.

The domestic trunk lines, which are the larger carriers—

Q. Pardon me just a moment. To get clear, what is a revenue passenger-mile?

A. A revenue passenger-mile is simply a single passenger carried one mile. So that, if the distance from here to Boston, let's say, is 184 miles, and you make a one-way trip, that would be 184 revenue passenger-miles.

Q. And is that the accepted way of measuring the density on an air route?

A. That is the accepted way of measuring the volume of traffic. The density would be the revenue passenger-miles per route mile.

Q. All right. Go right ahead now with 101.

A. Generally, speaking in transportation, in order to have a strong system, there has to be a fair amount of density on a route, and this is true not only in airlines but also in railroads or truck lines or any other form of transportation.

The last column in 101 there compares the route densities [fol. 574] first of all for the domestic trunk lines which have a fairly high density, even though there is considerable competition among them, of 917 revenue passenger-miles per route mile per day.

Very much smaller than that is the figure of 80 for the local service carriers in this country. Now, the local service carriers are designed by the Civil Aeronautics Board in laying out their certificates to be essentially non-competitive, and they are supposed to serve the smaller communities and feed traffic in from the smaller communities to the larger centers.

The local service carriers have been and are at the present time very heavily subsidized and, as you can see, their traffic density is comparatively low.

The next item is all of our foreign and overseas operations with the exception of the Pan Am, Panagra and Braniff routes in South America, and these have a density of 142 revenue passenger-miles per day.

Then we come to the various operations involved in this proceeding, and the figures there, whether measured on the Pan Am figures within South America or within South [fol. 575] America plus Miami Balboa, indicate that that route density is pretty much on a par with the density of the local service lines and is considerably below the foreign and overseas operations and of course very much weaker than the domestic trunk operations.

The Panagra figure of 84.6 is approximately on a par, and the Braniff routes, either south of Balboa or for the whole international division, are very low.

Q. What is your interpretation—

The Court: Excuse me.

Will you tell me again what domestic trunk operations means?

The Witness: The domestic trunk lines, your Honor, are the 12 larger carriers operating within the continental United States. They are American, United, TWA domestic, Eastern, National, Capitol, and so on.

The Court: But within the territorial limits of the United States?

The Witness: Yes, sir.

The Court: Yes, I see. Thanks.

The Witness: There are 12 of those trunk lines, and then [fol. 576] there are 12 local service lines such as Alleghany, Mohawk, and so on.

By Mr. Peck:

Q. What is your interpretation of the figures in PS-101, Professor Cherington?

A. My interpretation is that the route density of these South American routes is extremely light, and this seems to raise serious doubts as to the degree of competition that either should or can be supported over those routes.

As I indicated for the local service carriers that have a comparable density, they are specifically designed to be non-competitive, and, generally speaking, of course, the effect of competition is to reduce the density since the traffic that is available has to be shared.

Q. Does the traffic flow in column 3 include one-way traffic, or is that round trip?

A. Well, it represents traffic moving in both directions over the route. In the case of within South America, Pan American is 71.2 in both directions; and, if you assume the flow is balanced, it would be 35 passenger-miles per route mile per day in each direction.

[fol. 577] Q. All right. Let's move to 102, please, and tell us what that exhibit shows and what its significance is.

A. PS-102 is essentially supplemental to the preceding exhibit. It shows the same type of information, but here the local service carriers, which as we saw in the preceding exhibit have comparable route densities, are broken out individually and compared with the three carriers in South America.

You will notice that five of the local service carriers have densities considerably above those of either Pan Am, Panagra or Braniff.

One indication of the general policy of the Board on these light traffic density, local service routes is that in some cases they have decertificated or suspended service by trunk line carriers in order to give the local service carriers essentially a monopoly of some of the smaller points.

For example, American was suspended across Southern Michigan, their route there serving local points, and North Central was given that route on a non-competitive basis, and this exhibit simply supplements 101 along the same lines, that the South American routes are pretty light [fol. 578] density routes.

Q. Why are these local carriers so heavily subsidized, Professor?

A. In part because of their light traffic densities and in part because of the short-haul nature of their operations.

Q. All right. Let's take up Exhibits 103 and 104 and tell us, please, what they are and show.

A. Exhibits 103 and 104 show traffic at individual points within South America, and these two exhibits I would like then to compare with Exhibit 105.

103 is on the basis of emplaned passengers. By emplaned passengers I mean everyone who is loaded aboard an American flag carrier at one of these cities listed down

the left-hand side of the sheet. These people are emplaned or loaded for all destinations, not only to and from the United States but also locally, let's say, within South America.

The second column, the number of U. S. carriers serving, indicates the total number of carriers presently offering [fol. 579] service. In a few of the cases where there is only one carrier shown the asterisk at the very left-hand side of the table indicates that the Board has certificated, for example, a second carrier in Quito but the carrier is not offering service at the present time.

Generally speaking—well, in the case of Balboa and B.A., Buenos Aires, Pan Am and Panagra are treated here as one carrier. Essentially this shows that the first 15 points, generally speaking, have two carriers either serving or authorized, and then below that number there is only one carrier authorized or serving.

In terms of daily passengers emplaned, Asuncion, for example, at 3705 passengers emplaned, this is about 10 a day or five passengers a day emplaned per airline, and this is getting to be fairly light traffic.

I should mention the case of Balboa which is, I think, probably high in terms of the actual emplaned passengers. This is a statistical problem. The through-flight passengers are remanifested again at Balboa on Panagra, so they are essentially double counted in some instances at Balboa. [fol. 580] Q. Take 103 here for the moment. I take it that the number of passengers there from any point are passengers that took off on a plane from that city to go anywhere.

A. That's correct.

Q. So for Buenos Aires, for example, that means 37,000 passengers in a year that took an American carrier to go any place in South America, Latin America, United States.

A. Yes, sir. That is approximately a hundred a day on Pan Am, Panagra and Braniff.

Q. Together?

A. Together.

Q. Let's turn to 104 which is traffic exchanged between the United States and South America on United States carriers; is that right?

A. That is correct. And here arriving passengers and departing passengers are counted, provided they move between the city named and the United States.

Q. So let's take that Buenos Aires figure, for example, of 19,116. What does that mean as to how many passengers came and went between the United States and Buenos Aires a day on all the American carriers?

[fol. 581] A. Well, it means that approximately slightly less than 30 came and 30 went on the average on the three carriers, and if this traffic broke down equally there would be 10 a day coming and 10 a day going on each carrier.

Q. Now turning to 105, have you sufficiently explained that, Professor Cherington?

A. This 105 compares some of these points in South America with points, international points, elsewhere in the world in terms of the passengers exchanged, either arriving or departing to the United States, and breaks this down on a number-of-passengers-per-carrier basis.

Take the top line. For example, Nassau and the Bahamas is served by two carriers, and each carrier has an average of 86,000 passengers per year to and from the United States.

I think that it is clear that the South American points tend to fall well towards the bottom of the table, indicating that these two carrier points in South America are relatively light density.

It may be pertinent to point out that in a good many [fol. 582] places, international points, the Board has seen fit to certificate only one carrier. For example, at Milan, there is only one carrier with about 12,000 passengers; Munich has pretty close to 12,000; Zurich, 10,400, and so on. But as far as we could see, in terms of the multi-carrier, two carrier or more points, the Latin-American cities tended to fall well down the line relative to those in Europe and elsewhere.

Q. And what conclusion would you draw in that respect of 105, Professor Cherington?

A. This, again, goes to what we regarded as the basic thinness, if you like, of the South American points and the South American routes either in absolute terms or relative to other points on our international air network.

Q. Now turn to Exhibit 106, please, and tell us what that shows and why you did it the way you did.

A. The prior exhibits essentially went to the traffic which had been developed by the three carriers in South America. We wanted to get some measure of whether the developed traffic represented a reasonable amount of the potential, [fol. 583] and for this reason we ran out PS-106 which essentially compares on a gross-national-product basis South America with Europe and Australia and Asia.

Gross national product, as far as we could see, was perhaps the best single indicator of the wealth or economic potential in a country, and if there were a good many passengers per million dollars of gross national product this would indicate that a high proportion of the traffic potential had been developed; and, as you can see, in South America the potential is pretty well developed, 7.3 as against 3.7 for Europe. This, of course, don't go to the absolute size of the potential but to the relative degree to which what potential there is has been developed.

I think, again, what this leads to is the conclusion that these South American points and routes are weak by and large, but to the extent that they have any economic strength the carriers have developed air transportation over them to a reasonable degree; in fact, to a greater degree than in the other two areas involved.

Q. Would this comparison be any different if Panama and the Canal Zone were excluded from the South American statistics?

[fol. 584] A. Yes. The figure would be reduced to 5.7, I believe. But, even so, this would have been well above Europe or Australia, Asia.

Q. I notice you use Immigration and Naturalization figures here. Why do you use those figures and not O and D in some respects?

A. Well, we were talking here about the total air travel picture between the U. S. and these various countries. The Immigration and Naturalization Service figures cover the departures and arrivals of both aliens and U. S. citizens on foreign flag and U. S. flag carriers. The CAB's origin and destination figures do not cover passengers traveling on foreign flag carriers, who go all the way on a foreign flag carrier and who originate at one of the so-called gateway points in the United States, such as Miami, New York, and the like.

Q. So to get comparable and consistent figures you have to use the same source for both foreign flag and American flag; is that correct?

A. Yes.

Q. Now, taking Exhibits 101 to 106 together, which you have said—

The Court: I am just wondering, Judge. It is almost [fol. 585] one o'clock.

Mr. Peck: If you will give me just one question, it will be a perfect break, if your Honor please.

Q. 101 and 106, you have said, present the economic profile of this South American market. Now, having looked at it, summarize, please, your conclusions on that profile.

A. As far as we can see, these routes and points are relatively thin, but to the extent that potential traffic does exist, it seems to have been pretty well developed by the carriers.

Mr. Peck: Very good. May we then adjourn?

The Court: We will adjourn until 2:15.

(Recess taken until 2:15 p.m.)

[fol. 586]

AFTERNOON SESSION

2:15 P.M.

PAUL W. CHERINGTON resumed.

Direct examination (continued).

By Mr. Peck:

Q. Let us now take up Exhibits 107 and 108, Professor Cherington, and I will ask you to explain them to the Court.

A. These two exhibits essentially go to the financial operating results of the three U.S. carriers, Pan American, Panagra and Braniff, in their operations in the post-war period. The first, PS-107, deals with, shows the operating ratios of the three carriers, separately and combined, and compares these operating ratios with those of the domestic trunk lines. The operating ratio is essentially the extent

to which operating expenses absorb total operating revenues, and generally speaking, a low operating ratio is better than a high one, indicating that the margin remaining after operating expenses is greater.

In the case of Pan American, Panagra and Braniff, for most of the years—well, subsidy is included in the operating expenses of those carriers, to the extent that it was paid. [fol. 587] For the domestic trunk lines, of course, subsidy is also included, but by and large most of the trunk lines were all subsidy after about 1951.

The Pan Am, Panagra and Braniff subsidy figures are set forth in PS-21, that Mr. Ferguson talked about yesterday.

Q. In other words, in the operating revenues for Pan American, Panagra and Braniff are included the subsidy?

A. Yes, sir.

Q. And the operating ratio shows the ratio of expense to revenue, including subsidy?

A. That is right, yes, sir.

Q. Well, now, what is Exhibit 108? Tell us.

A. Well, just, if I may, I think it is clear from the operating ratio figures that by and large the three South American carriers have had fairly high operating ratios over this period. This is particularly true of Pan Am and Braniff, and it is also true of the three combined, and these high ratios are reflected in the relatively low rate of return on their investment which these carriers earned, and which are shown in PS-108.

The rate of return is usual profit on total investment. [fol. 588] Generally speaking, the Board has found that for international carriers a 9 per cent rate of return is a reasonable rate of return. There is some indication that the Board's staff in the domestic passenger fare investigation will urge a somewhat higher rate of return for international operations, but 9 per cent is the present standard of reasonableness, if you like.

The figures show that Pan Am almost got 9 per cent one year, but one year only. Panagra earned 9 per cent, or better in three years, and Braniff in one year. But for the rest of the period they were considerably less than 9 per cent, and the averages of course over the period of time

are substantially less, ranging from a loss operation for Braniff, to Panagra's 4.8.

The Court: Excuse me. When you computed the net profit, did you include the subsidy?

The Witness: Yes, sir.

The Court: Thank you.

Well, if you didn't include it, what would be the rate of return on the investment?

The Witness: It would be disastrous, your Honor. I don't think we made that computation, but I think I am [fol. 589] correct in saying that for the period all three carriers would have a substantial negative return. But these figures here do include the subsidy, so that the low rate of return is including that.

By Mr. Peck:

Q. Would you express an opinion, Professor Cherington, as to the economic satisfaction, if we might call it that, in returns of this kind in the operation of airlines?

A. Well, these are pretty low rates of return in the airline business. The Braniff operation of course is particularly poor, but the Pan Am and Panagra are far from being what could be regarded as satisfactory earnings.

The Court: Excuse me. Do railroads get a return as high as these?

The Witness: No, sir—well, I think they tend to get a return as high as these, perhaps, but generally speaking, the fair rate of return in the railroad business is considerably less than it is in the airline business, by virtue of their very heavy investment, and usually their very heavy fixed charges.

The Court: Is risk one of the elements in determining [fol. 590] a fair rate of return?

The Witness: Yes, sir; that would be an element.

The Court: Thank you.

By Mr. Peck:

Q. Have you made an investigation, Professor Cherington, of post-war competition in South America between United States flag and foreign flag carriers?

A. Yes, sir. We took a look at that, and the results of our examination are set forth in PS-109 through T13.

Q. All right. Would you take us through those exhibits, explaining each one, please, as to its showing and significance?

A. PS-109 shows for the various overseas areas a breakdown of total air passengers moving to and from the United States and shows the split between aliens and citizens, and generally speaking you can see that the South American area, that is continental South America including the Canal Zone and Panama, has the highest percentage of aliens moving.

Q. What is the significance of that?

A. 52.3 per cent. Generally speaking, in air transportation it is usual for aliens to travel on foreign flag carriers [fol. 591] more heavily than on U. S. carriers. I think that this is true for a variety of reasons. Foreign governments tend to route their government traffic via foreign flag carriers; there is a good deal of business pressure to travel in this way, and so on. But as we will see presently, a higher percentage of aliens travel on foreign flag carriers than of U. S. citizens.

Q. Does this exhibit give you some indication as to the comparative extent of the tourist trade between the United States and the geographical areas which are listed in PS-109?

A. This plus the other exhibits do, and we know from the Port of New York Authority study that was mentioned yesterday that the proportion of total air passengers who are traveling for business as against non-business reasons is higher in South America than it is, let's say, across the Atlantic. The figure on that is that 44.8 per cent total air travelers traveling to South America are traveling for business across the Atlantic. That comparable figure is only 31.4.

In terms of our own citizens—not citizens but U. S. residents who are traveling for business purposes, 55.8 per [fol. 592] cent of U. S. residents going to South America are traveling for business, and this compares with 26.8 per cent in the Atlantic.

So that I think you can deduce from that that there is a relatively smaller number of tourists in the South American market, and this I suppose is as you would expect by virtue of the fact that there aren't anything like the number of tourist attractions down there that you would find in, let's say, Europe.

By the Court:

Q. What is the basis of these last two percentages you gave? Is that the Port Authority survey?

A. That is the Port Authority survey, and they interviewed and had questionnaires filled out by travelers leaving New York and arriving in New York, both U. S. carriers and foreign flag carriers, and one of the questions they asked them was what the purpose of their trip was: was it business or other than business.

Q. I suppose for tax purposes they would answer it differently. In any event, it is not your study?

[fol. 593] A. No, sir.

By Mr. Peck:

Q. But I take it you do find a relation between those figures and the figures in 109. In other words, the high percentage of aliens traveling to South America in relation to other geographical areas indicates business travel more than tourist travel.

A. Yes, sir. Going on into PS-110, this exhibit essentially shows that the percentage of aliens in the Latin American or South American market has stayed relatively constant in terms of percentage in the last decade, so that the 52.3 per cent figure that is given in PS-109 is not unusual. It has been typical of the post-war period.

In PS-111, this table breaks down the alien travelers moving between the U. S. and South America by whether or not they used a foreign flag carrier, and this indicates the rise of the use of foreign flag carriers in the post-war period.

Essentially this reflects the growing strength and improved service of some of the South American carriers and also reflects what we believe to be the natural tendency

[fol. 594] of foreign nationals to travel on the airlines of their country. But obviously this alien traffic, which is a large percentage of the South American market, is increasingly using foreign flag carriers.

By the Court:

Q. Isn't there another factor other than nationality which would cause them to use their own flag ships? Isn't currency one of the big things?

A. Currency would be definitely one of the reasons.

By Mr. Peck:

Q. What about the other side of the picture, the Americans using American carriers or foreign flag carriers?

A. This is set forth in PS-112, which shows that the percentage of U. S. citizens using foreign flag carriers to and from South America has been growing since or during this decade. It is not as high as the aliens, but it is still an increasing percentage of the traffic. This, again, I think, reflects the fact that at least in some countries in South America, particularly recently, some carriers have begun to give very good service, which was not true in the immediate post-war period. So that, for example, Aerolineas has greatly improved service; VARIG, a Brazilian carrier, advertises a very deluxe service, and so on.

This general trend of where U. S. citizens tend increasingly to use foreign flag carriers I think can also be noted in the Atlantic where something in the order of 67 per cent of the total passengers are U. S. citizens, but our carriers have only approximately 40 per cent of the total traffic, indicating a substantial number of U. S. citizens in the Atlantic also use foreign flag carriers.

Finally, in PS-113 we show some of these figures, and to the extent that breakdowns are available in the Immigration and Naturalization Service statistics we show separate figures for the Argentine and Colombia. This indicates the wide variation that there is in some of these countries which tends to be obscured in the total figures. For example, between U. S. and Argentina in the last six years the percentage of traffic that our carriers have han-

dled has dropped from 81 down to 58.9, indicating essentially improved service by the foreign flag carriers.

[fol. 595a] In Colombia the percentage has been continually fairly low in this period of time from '53 to '58, indicating the relatively strong position of Avianca in that market.

[fol. 596] Q. Well, I notice that between the United States and South America as a whole the showing isn't so bad, the decrease in percentage of U. S. flag carriers. Would you comment upon that in relation to the relatively bad showing or lessening showing between U.S. and Argentina?

Well, of course a number of countries in South America don't have what could be described as competitive flag carriers as yet. The general trend seems to be that these will, will in many cases ultimately be established. It won't—so that it may, the pattern may ultimately look more like the U.S.-Argentine pattern.

Q. Well, now, taking these exhibits overall, from 109 through 113, what is your conclusion as to the position of the United States flag carriers in the South American market, vis-a-vis foreign flag carriers?

A. I would say that it was—that there had been some decline in recent years. Generally speaking, the U.S. carriers thus far have maintained a reasonable share of the traffic, but this may very well, and I would guess probably would be threatened as the foreign flag carriers become increasingly competitive. So that I would say, prospectively, [fol. 597] we could expect a diminishing share of the market in South America.

Q. Why have you used Immigration and Naturalization Service figures here in PS-113?

A. Well, here again, as we mentioned before lunch, the Immigration and Naturalization figures permit you to pick up the passengers who fly on foreign flag airlines all the way to their destination, or from their point of origin, and who disembark or embark at a gateway point, such as New York and Miami, and those passengers would not be picked up in the CAB origin and destination surveys.

Q. Why didn't you use the O and D figures for the U.S. carriers?

A. Well, we wanted to make these comparisons between

U.S. flag and foreign flag carriers, and this would essentially have been comparing apples and oranges, as between the two sets of figures.

Q. So in order to get a true comparison you had to use the same figures for both foreign flag and American flag.

A. Yes, sir.

Q. Now would you tell us, Professor Cherington, what the next set of exhibits are?

[fol. 598] A. As I indicated before lunch, we made two studies, where we essentially made differing route assumptions than what actually was the case in the last decade.

Exhibits 114 to 129 set out the results of these studies and they are summarized on Exhibit 114.

As I indicated, what we were trying to get at here was the economic consequences of two different route patterns in South America. We have expressed them in, for this study, in PS-114, as the amount of increased subsidy that would be required under the two route assumptions, and we essentially did this because under Section 406(b) of the Civil Aeronautics Act, we believe that if these two route assumptions had been in effect in the last decade, the Civil Aeronautics Board would have been required to have supported them with subsidy. If they hadn't, then the increase need set forth here would either have been met by the public in the form of higher fares, or it would have been met by the stockholders and owners of the carriers through losses or even lower earnings; or it would have been met in part by subsidy, in part by the public and in part by investors. But essentially, what we have [fol. 599] tried to show here is the economic impact of changes under the two assumptions we made.

Q. Now what are those assumptions?

A. Assumption number 1 is that Panagra would have operated a route from Balboa to Miami, and they would have operated the through service themselves over this segment and would have continued it north into New York with an interchange at Miami.

Braniff would have essentially operated its own routes, and Panagra—and Pan American would have continued to operate its present Miami-Balboa route for essentially local traffic. That was essentially assumption number 1, and

the results of that study for the impact on Pan American and Panagra, and in total, in terms of increased need for subsidy, and these—the net figures are set forth in PS-114.

We used two years for both sets of assumptions, 1952, which is about in the middle of the period we were looking at, and 1957, which was—well, which was the last year for which we had complete figures.

Q. Now, what is assumption number 2?

A. Assumption number 2 again includes a Panagra route from Balboa up into Miami; no change in Braniff; Pan American operating its Miami-Balboa route, and then [fol. 600] extended down the west coast, essentially paralleling Panagra, all the way to Buenos Aires, and the impact on Pan Am and Panagra, and the total, in the two years we studied, again '52 and '57, are set forth in PS-114.

Q. All right. Would you tell us what those figures are, and say something about the significance of it?

A. Yes, sir. Under assumption 1, which is the extension of Panagra into Miami in 1952, we estimate that Pan Am would have needed two million approximately seven hundred thousand dollars in additional subsidy; Panagra would have needed 1.3 million and a total increase subsidy requirement or economic impact, if you prefer, would have been \$4,000,061.

Under the same assumption, five years later, the same figure would have been \$4,708,000.

Now under assumption 2—and this is the assumption where Pan Am is parallel down the west coast—the Pan American subsidy requirement and that additional subsidy requirement in 1952 would have been a shade over four million, four million eighty thousand; Panagra's requirement would have been two million one and the total bill would have been six million one eighty three.

Coming down to 1957 these requirements would have [fol. 601] been slightly increased, Pan American's four million seven six four; Panagra's two million two one three; and the total bill, almost \$7,000,000.

And as I indicated before, this can be regarded either as increased subsidy requirements or as overall economic impact.

Q. That is, these are the amounts which these carriers would have required over and above all present income and subsidy.

A. Yes, sir.

Q. To get a return on their investment, their added investment for the services, at the accepted rate of 9 per cent; is that right?

A. That is correct; yes, sir, the net additional requirement.

Q. Would you say that these additional subsidy requirements, as you have put them, or economic impact, significant in amount?

A. I would say that they were significant in amount. I think they are fairly large as airline subsidies go. They are relatively large as compared to the subsidies that had been paid, as set forth in PS-21. I think they are particularly large when you consider the amount of increased or [fol. 602] improved service that would have been offered to the public under these route extensions.

Q. That increased service being what?

A. Well, it would essentially added a—under assumption 1, it would have added a third service, largely local in character, between Miami and Balboa, over and above the two services that already would be operating there. In the case of assumption 2—

Q. And which I take it could easily and amply take care of all the local traffic, couldn't it?

A. Yes, sir.

Q. Is there any question at all, Professor Cherington, that if you had two carriers conducting a through service and also conducting a local service, that there is absolutely no need or use whatever for a third carrier conducting really a local service?

A. I think that is correct.

Q. All right, go ahead.

A. And under assumption 2, you would be essentially laying down a third, a third carrier in along the west coast, in South America, over and above two carriers which are now providing what appears to be a perfectly adequate service. So that in terms of the net gain to the [fol. 603] traveling public, I think these increased subsidy

requirements, or the economic impact of these new authorizations would be pretty steep.

Q. Now perhaps you have sufficiently explained the meaning of the subsidy requirement, I am sure you have as a measure, but I would just like to get clear, as to whether this is an amount which the Government would have been compelled to pay?

A. Well, let me—not being a lawyer, I don't know whether they could legally have been compelled, but I think that clearly, under the language and spirit of Section 406(b), that if the Board and the President had certificated either the new routes under assumption 1 or the new routes under assumption 2, there would have been a strong presumption and moral obligation that the Government would have had to have met the need of the carriers in this respect.

[fol. 604] Q. Yet they don't always do it, do they?

A. No, sir, they do not.

Q. But the CAB does take into consideration, does it not, the reasonable use of frequencies in relation to the number of passengers to be carried?

A. They do. On the other hand, where there is an existing certificate they, generally speaking, expect the carrier to offer at least a minimum service, and in competitive situations, if you expect the carrier to compete, this may be a somewhat larger number than if there was no competition, if the carrier wants to stay in the market at all.

Q. As you have explained your calculations are for just two years, 1952 and 1957. Would you comment as to whether they have a similar significance or not in respect to other years?

A. I believe they do. These are essentially, as I indicated, the net additional figures, and as far as we can see these are pretty much typical of the early and middle part of the period, and 1957 is pretty much typical of the more recent period in terms of this increased subsidy need.

Q. Looking ahead, what would you anticipate the subsidy requirements, as you have phrased it, would be, more or less than these figures?

A. Well, I think you will probably have two trends here operating in different directions. One would be the build-up

in traffic over the next few years which would have the tendency probably, if it built up fast enough, of producing these needs. On the other hand, you have coming in the larger jet aircraft which might very well, as you split up and chop this available traffic finer and finer, lead to increased needs under a minimum frequency pattern.

Q. Explain a little more fully what the impact of the jet is in a market.

A. Well, the jets for the most part have a capacity that is roughly twice of the existing planes in terms of seats, and although their seat-mile costs are hopefully going to be about the same, their total plane-mile costs are considerably in excess of the present airplanes. So that you would immediately be putting on to this relatively thin route competitive jet service, and we would expect that unless traffic built up very fast, that the load factor, that is, the percentage of seats occupied, would drop very, very sharply.

[fol. 606] Q. Reducing the need for frequencies.

A. Reducing the theoretical need for frequencies, but under competition it is a little difficult to see how far down you could cut the frequencies.

Q. But, as the frequencies are maintained, unless the traffic develops in proportion to the increased seat capacity, it means seats empty, doesn't it?

A. Yes, sir, and this would tend to send the subsidy requirement up.

Q. Now, what are Exhibits 115 to 129, Professor Cherington?

A. These essentially are the back-up for the conclusions of the studies as set forth in PS-114 dealing with the various rules or assumptions that were made for the study, the traffic estimates, and the revenue calculations, the cost and the return on investment calculations.

Q. Would you take us through them as simply and as quickly as you can so that we will understand what the steps were in your study?

A. Yes, sir. In PS-115 we set forth for the two route assumptions the rules that we made or the assumptions that we made for making the study, and these deal with [fol. 607] both the question of routes as set forth on page 1

of 115, schedules as set forth on page 1, and thereafter. There is considerable detail here so that it is possible to follow these assumptions. The station codes on pages 3 and 4 are interpreted with a station decoding sheet on page 5.

I might say that under the scheduling assumptions we have included under assumption 1 a daily round trip for Pan American between Miami and Balboa in both 1952 and 1957. This would compare with the 10 Panagra trips in 1952 and the 14 in 1957. We felt that if Pan Am was going to stay in this market at all that seven trips a week would essentially be the minimum service pattern, particularly when Panagra was operating more trips and Braniff was operating an equal number or more trips.

As I indicated, 115 gives the assumptions.

In 116 we essentially took the traffic in 1952 and 1957 under the route assumptions and redivided it under the two route studies, and it is basically divided in accordance with schedule frequencies. So at the conclusion of these tables you get estimates as to the number of revenue passenger-miles which shift back and forth from one carrier or another.

Q. With Panagra being assigned all the through traffic which is now carried by Pan American/Panagra; is that right?

A. Yes.

Q. And dividing the local traffic on the basis of frequency of service?

A. That is correct.

Q. Go right ahead, please.

A. That is under assumption 1.

And under assumption 2 the through schedules south of Balboa are split and the traffic is essentially split.

In PS-117 we essentially convert the changes in revenue passenger-miles to passenger revenues by assigning or by multiplying by their estimated yield per passenger-mile, and the footnotes essentially indicate the basis for that estimated yield. So we now have the passenger revenue side of the picture under these two assumptions.

When then want to adjust this for non-passenger revenue, and this is done in PS-118 on a factor basis, and this

is the revenue for cargo, mail, excess baggage and the like. [fol. 609] So that completes the revenue side. Those figures taken together complete the revenue side of the picture.

In PS-119 we start in on the costs, and we start in by setting forth the airplane miles that will be flown under the various assumptions. I might mention that the figure for assumption 1, the change in plane-miles, is two lines up from the bottom in the tables, Miami-Balboa footnote 2, and then the assumption 2 changes are given in the total which do not include that Miami-Balboa footnote 2 figure, but this gives us the change in plane-miles under each of the assumptions in the two years.

And these in PS-120 are broken down by aircraft types in view of the fact that different airplanes have different cost characteristics. That is shown in PS-120. Certain aircraft operating costs for Pan Am and Panagra in the two years are shown in PS-121.

These are ultimately used in the summary tables that we will come to in a moment to get the expenses of these operations to the extent that they relate to aircraft operations.

PS-122 sets forth our estimates as to the additional city [fol. 610] ticket offices that we believe Panagra would be required to establish under either assumption 1 or under assumption 2. We feel that, if they were going to go it alone, they would want to establish their own sales offices essentially in Boston, New York, Los Angeles, San Francisco, Chicago, Miami, Dallas and Washington.

Furthermore, under assumption 2 we feel that they would want to, if they were in competition with Pan Am down the West Coast, have an independent office at Rio, Montevideo and Caracas.

We essentially got our office size and our annual rentals by making a survey of rental costs in these various cities. The employees are essentially related to the expected traffic that could be generated, and the other expenses are a factor to the employees. So that would be an additional cost item for the two assumptions in the two years.

Under assumption 2 in PS-123, furthermore, we believe that—well, we were sure that Pan Am would have some

additional station expenses down the West Coast, and this exhibit essentially shows the calculations for those Pan Am stations.

Finally, in Exhibit 124 we show in summary form but [fol. 611] with explanatory footnotes the actual calculations for the two assumptions in 1952, and those are the figures, that are essentially transferred back to PS-114, the summary sheet.

The footnotes to these tables in 124 and again 125 give the basis for the various dollar estimates in the cost area. This takes us on through PS-127.

Then in PS-128 we present our estimates to either the increase or decrease in investment that would be required under the two alternatives for Pan Am and Panagra and in total. Some of this is in aircraft and spare parts, some in ground equipment, and some in the area of net working capital.

And finally in PS-129 the rate of return estimate is set forth for the various assumptions.

Those figures, as I indicated, are all essentially the back-up or the detail or the summary, PS-114, where these are all added up.

Q. Mr. Mallory has suggested to me that it may not be altogether clear yet what this 9 per cent is on to get the required subsidy. What we are talking about getting 9 per cent on is only the additional investment which would be [fol. 612] required for these extensions that you are talking about under assumptions 1 and 2: is that not correct?

A. That is correct.

Q. In other words, we are not talking about going back and making up a 9 per cent return on their present investment which neither Panagra or Pan American has been fortunate enough to make 9 per cent on very often?

A. I am sure they would be happy to get it, but for these purposes we just showed 9 per cent on this additional investment arising under assumption 1 or 2.

Q. And PS-114, I think, as you say, is the summary statistical table which reflects all of the calculations which are in Exhibits 115 to 129.

A. Yes, sir, that is correct.

Q. Coming down, as you have described it, to the addi-

tional subsidy requirements or at least the economic deficit that somebody would have to make up—is that a fair way of putting it?

A. Yes.

Q. —either the Government or the traveling public or the stockholders of these companies.

A. Yes, sir.

[fol. 613] Q. Separately or in some combination.

Now, just a final question: Would you comment, please, and express your opinion as to the effect of the creation of these services under assumption No. 1 or No. 2 on the traveling public, the taxpaying public and the carriers involved, meaning their stockholders?

A. In terms of the carriers I think that the effect on Pan American under either assumption 1 or assumption 2 would be serious; it would entail substantial either loss or increased subsidy requirements. As far as we can see the same thing is true of Panagra; the effect would be bad. The effect on either the taxpayers or the traveling public in our opinion would be much heavier than the benefits that they would be apt to get out of this increased competitive service.

Q. And as far as Panagra alone is concerned, do you see any possible advantage to Panagra on either of these assumptions?

A. If they got all of this money from the Government in the form of subsidy you might make the argument that they would like this in view of their desire to get into [fol. 614] Miami. But as an economic proposition I can't see that it would improve their position.

Q. I think I detected while going through here there was one slight mistake on a footnote.

A. Yes, sir. I would like to mention that on 116, PS-116, page 6 of that table, in the heading of the table where it says "Actual Revenue Passenger-Miles," then there is a footnote 1, that footnote 1 symbol should be struck out.

Q. You mean there is no footnote 1—should be no footnote 1 on PS-116 on page 6?

A. Well, there shouldn't be the symbol. You shouldn't refer—the symbol 1 should be struck out there in the heading of the table.

Q. And where should it be?

A. Well, it is back on a preceding page.

Q. I see, on a preceding page.

A. All the way back on page 1.

[fol. 615] The Court: I got lost on that. Should footnote 1 be there with that caption?

The Witness: Yes, but this little one up here should be struck out.

The Court: And what would the note refer to?

The Witness: That refers all the way back to page 1, these ones here.

The Court: The footnote number 1 on the bottom of page 6 of Exhibit 116 refers generally to the entire exhibit?

The Witness: No, it refers to three numbers all the way back to page 1 of the exhibit.

By Mr. Peck:

Q. Would you be prepared then to adopt the statement, Professor Cherington:

"We are convinced that the available traffic potential in South American will not warrant the subsidy support of three such services and that their existence would lead to 'a waste of public money or private investment'?"

A. Yes, sir.

Mr. Peck: I am quoting, your Honor, from the CAB's decision in the Balboa case.

[fol. 616]* Q. Now one thing more, Professor Cherington, and I will be finished. Mr. Kenney read to Mr. Ferguson from the decision of the Board in Docket No. 4882 the following quotation:

"The Latin American area is today the largest foreign air transportation market to which American flag carriers have access. Moreover, it is a market which has expanded tremendously in the past and which may be expected to continue to grow in the immediate as well as the more distant future. The importance of this market and the

rapidity of its growth is illustrated in the table set forth below"—

and that table below shows travel by air into Latin America of 928,157 passengers in the year 1951.

Now, would you comment upon that in the light of the testimony you gave about the relative thinness of the South American market and the high degree of development of that market?

A. I think, sir, that essentially the problem here is that we have to differentiate between the South American routes and points which we were talking about, which include the points and routes within the continental limits [fol. 617] of South America, plus the Canal Zone, and what the Board is referring to there as "Latin America," which includes the Caribbean, Central America, Mexico and, if I recall correctly, Bermuda, a great deal of traffic, let's say, moving between the States and Havana, and if my memory serves, out of that figure of nine hundred and—

Q. 28,000.

A. —28,000, the South American portion of that, that we have been talking about, amounts to some—to only about 140,000.

Q. Well, let's see. I hand you what I believe are supposed to be the exact figures of the breakdown on that. Verify it if you will and give it to us, as to how that 928,000, which makes up the total Latin American market, is broken down by various countries?

A. Well, these—

Q. Or categories of countries?

A. These, to the best of my belief, are the Immigration and Naturalization statistics for fiscal 1951, that is, the year ending June 30, 1951, and the total, as described "Latin America", is 928,157. Then included in that total, and what it is, I am not sure, Canada and Newfoundland. [fol. 618]. 26,071; Bermuda, 103,492; South America and the Canal Zone, 141,669; Central America and the Caribbean area, 656,926.

Now of that last figure that I read, 656,926, 387,723, or a little more than a third of Latin America, moved between the States and Cuba, and 166,230 moved to the British West Indies, Jamaica, and so on.

So that out of the 928,157 figure that you mentioned, only 142,000 roughly, concerned the traffic that I have been talking about in my testimony.

Mr. Peck: Very good. Thank you.

[fol. 619] Cross examination.

By Mr. Kenney:

[fol. 620] Q. Now, Professor, you mentioned some figures early in your testimony, having to do with people taking trips on business, and tourists, and first you mentioned the figure 44-8/10 per cent as business travelers. Is that to South America?

A. Yes, as I recall.

Q. And that would mean that 55.2 per cent would be tourists; is that correct, sir?

A. That's right—well, not tourists, but all other.

Q. All other?

A. All non-business.

Q. Now breaking it down to American travelers, I believe you said that 55-8/10 per cent of the Americans that went to South America traveled there on business.

A. Yes, sir.

Q. Would that mean that the other 44-2/10 per cent would be tourists, or would it include different classifications?

A. No, sir; there are only two breakdowns in the survey going for business, going for everything else, so they would [fol. 621] be going for everything else, including tourees.

Q. Do you know what the figure on tourists would be?

A. No, I do not.

[fol. 626] Mr. Mallory: We have no objection to 1125, 1126 and 1127, and I understand the Government will stipulate that Pan American had not seen these prior to the [fol. 627] time the deposition of Mr. Faucett was taken.

Mr. Kenney: I so stipulate.

(Marked Government Exhibits 1125, 1126 and 1127 in evidence.)

[fol. 628] Mr. Kenney: Yes.

I intended to offer in evidence a series of communications between Pan American and Grace and Panagra in November, 1956, January, 1957, and a board meeting of January, 1957, of Panagra, and a further letter of January 11, 1957, together with a survey report prepared by Panagra in connection with a proposed West Coast United States service.

Mr. McKay: No objection.

Mr. Kenney: Do you want to see these?

Mr. Mallory: I would like to, yes.

Mr. Peck: Mr. Kenney, would you tell us who prepared this survey?

Mr. Kenney: I think it was prepared by Panagra.

Mr. Peck: We would be interested in learning what individuals prepared it.

[fol. 629] Mr. Kenney: I don't know. It was obtained from their files.

Mr. Kiernan: I think I can state it was prepared under the supervision of Mr. Farrell.

Mr. Mallory: Could you identify him directly?

Mr. Farrell: If it please the Court, the route study and the recommendations were prepared under the general supervision of Mr. Shea who is president of Panagra, and I as assistant to Mr. Shea was directly involved in the preparation of it with Panagra officers, Panagra personnel, and some Grace personnel who did some statistical work.

Mr. Peck: Could we just identify in addition to the Grace personnel who did the statistical work, and the identity of Mr. Shea and Mr. Farrell with Grace? Then that would be sufficient.

Mr. Kiernan: Mr. Shea, of course, is president of Panagra and he is also executive vice president of W. R. Grace and Company.

Mr. Peck: Does Mr. Farrell have any connection with Grace?

Mr. Farrell: I am a director of Panagra, Judge Peck, and a vice president of Panagra.

[fol. 630] Mr. Peck: And are you an officer of W. R. Grace and Company?

Mr. Farrell: I am not an officer of W. R. Grace and Company.

Mr. Peck: Do you have any connection with W. R. Grace and Company?

Mr. Farrell: I am employed by W. R. Grace and Company.

Mr. Peck: In other words, your total salary comes from W. R. Grace and Company, is that it?

Mr. Farrell: Reimbursed in part by Panagra; that is correct.

Mr. Mallory: It can go in subject to a motion to strike.

(Marked Government's Exhibits 1131 through 1139 in evidence.)

[fol. 634]

New York, May 22, 1959,
10.30 a.m.

The Court: Did you want to cross examine the professor?

Mr. McKay: Yes.

Mr. Peck: Professor Cherington.

PAUL W. CHERINGTON, resumed.

Cross examination.

By Mr. McKay:

Q. Professor, as I understand it, you are a director of and a consultant with the United Research Corporation?

A. Yes, sir.

Q. Is the predecessor of United the Aeronautical Research Institute? Is that a predecessor company?

A. Not, I guess, in the strict legal sense, but the group [fol. 635] is the same. The Aeronautic Research Foundation, it was.

Q. And you and your company, United, were retained by Pan American to make certain studies in this case?

A. Yes, sir.

[fol. 636] Q. To your knowledge, has United made any previous studies for Pan American?

A. No, they had not.

Q. Has Aeronautic Research, to your knowledge, made any previous studies for Pan American?

A. No, sir.

The Court: You don't make a distinction between the word "studies" and collection of data or something. I understood you to say that one of your clients, prior to your testifying, was Pan American.

The Witness: Well, we have done—since we took on this assignment for this case we have done some other work in unrelated areas for Pan American.

The Court: Nothing previously?

The Witness: No, sir.

[fol. 638] Q. Did you hear Mr. Ferguson testify here earlier this week, I believe, in this case?

A. I am not sure that I heard all of it. I certainly heard the bulk of it.

Q. Have you examined the exhibits that he sponsored as a witness, that is, Pan American's Exhibits 1 through 23?

A. Generally speaking, yes.

Q. Did you have anything to do with the preparation of those exhibits?

A. No, sir.

Q. You had seen them prior to their being introduced in evidence here.

A. Yes, sir.

Q. Professor, do you recall three of those exhibits, namely, Pan American's Exhibits PS-7, 9 and 11, which set out figures representing the average passenger load per plane-mile for Panagra's routes, Pan American's Miami-Balboa route and Pan American's East Coast route?

A. Not specifically.

Q. Have you got a copy?

A. I have a copy. 7, 8 and 9?

[fol. 639] Q. 7, 9 and 11. You perhaps might recall that I inquired of Mr. Ferguson why the statistics compiled in those exhibits terminated with the year 1945, and he testified that he believed that your testimony and exhibits would cover the subsequent period. Do you recall that?

A. Yes, sir, I do.

Q. Your exhibits, Professor, PS-101 to 106 relate to density of air traffic in the year 1957 and for no other year; is that correct?

A. That is correct.

Q. And having examined Mr. Ferguson's exhibits, if I may refer to them as such, PS-7, 9 and 11 show average passenger load on several routes for a number of years, the last of which is 1945; is that correct?

A. As far as I can see, that is correct.

Q. Now, Professor, is it possible to compare the passenger density figures contained in your Exhibits 101 to 106 for the year 1957 with the information set forth in Mr. Ferguson's Exhibits 7, 9 and 11 for the year 1945 and earlier years?

A. I believe not directly.

Q. Well, do you believe that Mr. Ferguson's method of approaching the question of traffic density is as valid as [fol. 640] the method you have followed? As I understand it, Mr. Ferguson uses passengers per plane-mile while you use revenue passenger-miles per route mile per day.

The Witness: Would you read the question again, please?

(Question read.)

A. I believe, frankly, that our figures on route density are somewhat more meaningful in terms of getting a measure of the overall strength of a route.

Q. Professor, could you explain to us what you mean by more meaningful?

A. It essentially takes into account the overall miles and the total traffic moving over those miles rather than simply related to the plane-miles operated, so that it relates directly to the economic strength of the route itself.

Q. Professor, looking at Mr. Ferguson's Exhibits 7, 9 and 11 and your Exhibits 101 to 106, is it possible to determine what change has taken place in the density of traffic during that period, namely, 1945 to 1957? [fol. 641] A. Looking at his exhibit?

Q. And yours. In other words, Mr. Ferguson ends with the year 1945; your exhibits relate solely to the year 1957. Isn't it a fact that it is impossible to determine, by looking at those exhibits, what change, if any, has taken place in the density of traffic?

A. Except in a most general way I would say the two figures simply are not comparable.

Q. Did you in connection with the study made for Pan American make any investigation of the development or change in traffic density over Pan American and Panagra's routes during the period since the war?

A. I really don't recall whether we ran it out for every year or not. We certainly looked at the general--

Q. Did you run it out for any year other than for 1957?

A. In terms of our density figure?

Q. Yes, sir.

A. I don't think so, no.

Q. Do you know of any reason for not doing so, Professor?

[fol. 642] A. You mean in order to get the trend of the growth?

Q. Yes, sir.

A. We were trying to essentially take a look at the current density of the route in comparison with those of other routes.

Q. But you did not think it necessary in connection with this study to make a study of the changed density of traffic between the years 1945 and 1957 or '58.

A. I think, not in view of the low density at present.

Q. Professor, let me refer to the quotation from the Civil Aeronautics Board opinion in Docket 4882 which was put to you the other day by Judge Peck.

So the record may be clear, the opinion was that of November 23, 1954, released on April 20, 1955, and the quotation appears at pages 5 to 6.

The Civil Aeronautics Board statement was as follows:

"The Latin-American market is today the largest foreign air transport market to which American flag carriers have access. Moreover, it is a market which has expanded tremendously [fol. 643] in the past and may be expected to continue to grow in the immediate as well as the more distant future. The importance of this market and the rapidity of its growth is illustrated in the tables set forth below."

The table referred to by the board compared total travel by air with Latin America in the year 1951 with such travel in the year 1931. Do you recall that generally, Professor?

A. Generally, yes.

Q. Judge Peck asked you to comment on that statement in light of your testimony concerning relative thinness of the South-American market. In commenting upon the testimony you did not address yourself to the factor of growth noted by the CAB but rather to the definition of the Latin-American market as including within a number of areas other than South America. Do you recall that?

A. I do.

Q. Can you tell us now, Professor, whether you have any information or opinion with respect to the extent of the growth which has taken place in air travel between the United States and South America during the period 1945 to 1957?

[fol. 644] A. Oh, I think it has increased, beyond doubt.

Mr. McKay: Your Honor, we have made a number of calculations here which I would like to present to the professor. I would like to have this marked for identification, if I may. I think the number is on there, 174, I believe.

(Marked WRG-174 for identification.)

By Mr. McKay:

Q. Professor, I have handed you a copy of Grace's Exhibit 174 for identification, and I think it will assist you in following certain of the questions I am about to ask.

It is true, is it not, that you testified that the air travel between the United States and South America and the Canal Zone in 1951 was 141,669 passengers based upon INS statistics? Is that correct?

A. That's what I recall.

Q. It is also true, is it not, that your Exhibit PS-110 shows that the total air travelers between the United States and South America similarly defined in 1957 was 272,059 and that in 1958 it was 312,859; is that correct?

[fol. 645] A. I believe so, yes.

Q. That means, does it not, that total air traffic between the United States and South America almost doubled between 1951 and 1957 and substantially more than doubled between 1951 and 1958? Is that correct?

A. That is correct.

Q. I would like to turn, now, Professor, to the specific sector between Miami and Balboa to which much of your study was directed.

It is true, is it not, that revenue passenger-miles is the accepted way of measuring volume of traffic?

A. That is correct.

Q. And comparison of revenue passenger-miles in various years would indicate the change in volume of traffic, would it not?

A. But not necessarily density.

Q. Change in volume?

A. Yes.

Mr. McKay: Please mark this as 175.

(Marked Exhibit WRG-175 for identification.)

[fol. 646] By Mr. McKay:

Q. Professor, if you will turn to Mr. Ferguson's Exhibit 9, that gives the Pan American passenger-miles over the Miami-Balboa sector as 20,928,000, does it not?

A. That's correct.

Q. It is true, is it not, that the Pan American revenue passenger-miles for 1952 over the sector can be derived by totaling the third column on page 1 of your Exhibit 116?

A. Yes, I believe so.

Q. And if you will accept the figure, we have totaled them up subject to correction, that figure is 42,880,000.

Now it is also true that with respect to 1957 Pan American's revenue passenger miles over the Miami-Balboa

sector can be obtained by adding the figures in the third column on page 2 of that exhibit; is that correct?

A. Yes, sir.

Q. And, if you will accept this sum subject to correction, it is 68,284,000.

That means, Professor, does it not, that the volume of [fol. 647] Pan American's traffic over this sector somewhat more than doubled between 1945 and 1952 and that it more than tripled between 1945 and 1957? Is that correct?

A. Assuming these figures are correct, yes.

Q. Well, if you find any error in them, Professor, advise us.

Professor, I would like you to consider your analysis of traffic density in 1957 as shown in your Exhibit 101.

(Marked Exhibit WRG-176 for identification.)

Q. Professor, I have handed you a copy of Grace's Exhibit 176 for identification to assist you in the following question:

You show, Professor, do you not, the revenue passenger-miles flown, the route miles operated, and the revenue passenger-miles per route mile per day for Pan American within South America plus the Miami-Balboa sector? Is that right?

A. Yes, sir.

Q. Professor, you don't give any indication in this exhibit, however, of these figures with respect to the Miami-Balboa sector alone, do you?

A. No.

[fol. 648] Q. It is true, is it not, that the revenue passenger-miles flown for this section, according to your figures on that exhibit, can be obtained by deducting the figure for within South America from the figure you set forth for South America plus the Miami-Balboa sector?

A. That is correct.

Q. And by the same process it is possible for us to obtain the route miles operated over the Miami-Balboa sector?

A. That is correct.

Q. Once these two figures are obtained it is possible to derive the revenue passenger-miles per route mile per day in accordance with the formula revenue passenger-

miles flown divided by the product of 365 times route miles operated; is that correct?

A. Yes, sir.

Q. And that gives us a density figure, Professor, of 161.5 revenue passenger-miles per route mile per day over the Miami-Balboa sector, does it not?

A. Yes, sir.

Q. Isn't it true, Professor, that this route density is more than twice the average density on Pan American's [fol. 649] routes within South America as shown by your Exhibit 101?

A. That is correct.

Q. Isn't it also true, Professor, that this figure is substantially in excess of the average density for foreign and overseas operations generally as shown by your Exhibit 101?

A. Well, I wouldn't say substantially, but it is somewhat above that, yes.

Q. Isn't it also true, Professor, that the figure of 71.2 representing the revenue passenger-miles per route mile per day on Pan American's routes within South America is an average figure?

A. In the sense that it covers all the traffic and all the routes, yes.

Q. And isn't it true that the density on Pan American's routes within South America varies widely above and below the 71.2 figure?

A. I would imagine so, yes.

Q. And isn't it true, Professor, that some of the routes on which Pan American provided service had a density substantially less than 71.2 revenue passenger-miles per route mile per day?

A. Well, I don't know that I have seen the figures showing the dispersion around this average.

[fol. 650] Q. Your answer is you don't know?

A. I don't know.

Q. Professor, turn to the figures shown on your PS Exhibit 101 for foreign and overseas operations. That is the figure for all foreign overseas operations on all types of routes excluding only Pan American's Latin-American Division, Panagra and Braniff; is that correct?

A. That is correct.

Q. In arriving at this density figure you relied, as your exhibit shows, upon the monthly report of air carrier traffic statistics for December, 1957, issued by the Civil Aeronautics Board, did you not?

A. I believe so, yes.

Q. Now turning to Grace's Exhibit 176 for identification, a copy of which you have before you, as indicated on that exhibit that report gives certain figures for the foreign and overseas operations of Northwest Airlines which indicates a traffic density of 53.6 revenue passenger miles per route mile per day, does it not?

A. Yes, it does.

Q. That figure is substantially below the figure for [fol. 651] foreign and overseas operations shown in your exhibit, is it not?

A. Yes, it is.

Q. Is it not the fact, Professor, that the principal international route of Northwest is its route to Japan?

A. Yes.

Q. Isn't it also a fact, Professor, that Pan American has applied for a route which would substantially, if not precisely, parallel Northwest's route?

A. So I understand, yes.

Q. Now, Professor, you do not in any of your exhibits, as far as I can see, that is, with respect to the density of traffic, compare the situation in 1957 with the situation at the beginning of the period you have said was covered by your study. I think you said the post-war period down to 1957. Is it correct that none of your exhibits cover that period but only relate, as you previously testified, to the year 1957?

A. That is correct.

(Marked Exhibit WRG-177 for identification.)

[fol. 652] By Mr. McKay:

Q. Professor, with Grace's Exhibit 177 for identification before you, is it not a fact that from your Exhibit 101 it is possible to derive the density of traffic for the Miami-Balboa sector? We just went over that earlier: is that correct?

A. Yes.

Q. And we found that to be 161.5 for 1957.

A. That's correct.

Q. I would like to bring your attention to the traffic density in 1945 on the Balboa-Miami sector. We can obtain this, can we not, by taking the passenger-miles flown in that year, as shown by Mr. Ferguson's Exhibit PS-9, the route miles operated in 1944 as shown by Mr. Ferguson's Exhibit PS-12, and they may be assumed to be substantially the same as the '45 figure, I would think; wouldn't you, Professor?

A. Yes.

Q. Do you agree that with these figures we derive a density figure of 47.7 for 1945 on the Balboa-Miami sector?

A. That is correct, and the mileage difference I, believe, is one stop somewhere along the line at Camaguay.

[fol. 653] Q. That would be a minor difference, though, wouldn't it, Professor?

A. Well, that, as I recall, is the difference in the mileage.

Q. Doesn't that indicate the density on this sector has more than tripled between 1945 and 1957?

A. Yes, it does.

Q. Professor, I would like to turn to the criterion employed by Mr. Ferguson in the exhibits sponsored by him which do not go beyond the year 1945 and see if we can't bring the figure up to date.

(Marked Exhibit WRG-178 for identification.)

By Mr. McKay:

Q. Professor, with Grace's Exhibit 178 for identification before you, it is true, is it not, that the average passenger load shown by Mr. Ferguson's Exhibit PS-9 for Pan Amer- [fol. 654] ican's Miami-Balboa sector in 1945 is 17.6?

A. I believe so, yes.

Q. You show, Professor, in your Exhibit 120, the aircraft-miles for 1957 over this sector, do you not?

A. Yes.

Q. And we have previously derived from your exhibits the passenger-miles over this sector in 1957, have we not?

A. Yes.

Q. It appears, then, Professor, does it not, that in 1957 the average passenger load was 39.3?

A. I would imagine so.

Q. This represents a doubling over the last figure provided by Mr. Ferguson, does it not?

A. You mean the 17.6?

Q. Yes.

A. Yes.

Q. Professor, turning to your Exhibit 102, there is one figure of revenue passenger-miles per route mile per day for North Central that I just can't follow through. I wonder if you would help me. See opposite North Central.

[fol. 655] A. I would imagine that there was a typographical error in their revenue passenger-miles. I would be glad to check that.

Q. Well, what my trouble was: I was wondering whether someone forced a balance here. If you were to divide 21,355 and the figures you have of 10,350,000, you don't come out with 120.4, do you, Professor?

A. No, you do not.

Q. You come out with a 12.04.

A. That is correct. On the other hand, from what I know of North Central, they have a good deal more traffic than what we show here. In other words, they would have many more than 10,000,000 passenger-miles.

Q. More like 110,000,000, wouldn't it be, Professor? I was just wondering how you got the 120.4.

A. I would have to check that.

Q. Well, I have checked it, Professor, and it is 110,743,000 revenue passenger-miles and 2,355, and that comes out to 117.2. Do you accept that correction, Professor, subject to check?

A. Yes.

Q. This Exhibit 102, Professor, compares the Pan American Latin-American Division, Panagra and Braniff with [fol. 656] the so-called local service carriers in accordance with your criterion of traffic density, does it not?

A. That is correct.

Q. Isn't it true, Professor, that this exhibit, like Exhibit 101, fails to show the density on the Miami-Balboa sector?

A. Well, as you can see, it shows it in two ways. One was for the whole system within South America plus Balboa-Miami, and one within South America, but it does not show Miami-Balboa separately.

Q. You did not think it was necessary to show that separately, Professor. That is the 161.5.

A. That's right.

Q. Isn't it true that the density of 161.5 revenue passenger-miles per route mile per day on this sector is comparable to the highest density shown on that exhibit?

A. Yes, it is.

Q. It is also your testimony, Professor, is it not, that these Exhibits 101 to 105 are designed to show what you referred to as the economic profile of these routes in terms of traffic; is that correct?

[fol. 657] A. That is correct.

Q. Professor, aren't there other factors which are relevant to what you call the economic profile of a route?

A. There may be, yes. Length of haul would be one which I would be able to mention.

Q. The difference between a short-haul operator and a long-haul operator; that is one factor, isn't it?

A. In terms of traffic density, this factor doesn't enter into it.

Q. You testified, Professor, that the local service carriers have been heavily subsidized, and I quote, "in part because of the short-haul nature of their operations." Is that correct?

A. That is correct.

Q. Referring to the book that I believe you wrote, "Air Line Price Policy," which was published in 1958—

A. Yes.

Q. —at page 442 you state, and I quote:

"It is generally agreed that costs per passenger mile for such traffic"—and by traffic there you are referring to short-haul traffic—"are relatively high compared to those for long-haul traffic."

[fol. 658] Is that correct?

A. Yes.

Q. And you also state in general, and I quote, "There seems to be little doubt that the short-haul market is under

today's operating procedures less attractive than long-haul traffic." Is that correct, Professor? And you believe those statements to be true, do you not?

A. As they have an impact on cost of operation, which is what I was talking about in that section, as I recall.

Q. It is true, Professor, that a route segment of 1,166 miles, such as the sector between Balboa and Miami, is a long haul and not a short haul?

A. That is correct.

Q. Is it your expert opinion that a meaningful comparison can be made between short-haul carriers, such as the local service carriers listed on your Exhibit 102, and international carriers, such as Pan American and Panagra, simply in terms of traffic density on their respective routes?

A. I think that is very significant, yes.

Q. You think that is a meaningful comparison.

A. Yes, I do, in terms of traffic density.

[fol. 659] Q. I would like to turn to your Exhibit 103. In that exhibit with respect to Balboa and Buenos Aires you state the two U. S. carriers are serving those points by considering Pan American and Panagra as one with Braniff being the second carrier; is that correct?

A. That is correct.

Q. It is a fact, Professor, as you know, that Pan American, Panagra and Braniff are each separate, certificated carriers?

A. Yes.

Q. There is, then, is there not, three-carrier competition rather than the two-carrier competition as your exhibit implies?

A. Well, this exhibit goes to the number of carriers serving. By no means all of these would necessarily be competitive ones.

Q. Well, Professor, there are three carriers, Pan American, Panagra and Braniff, are there not?

A. Yes, and we recognize this with this footnote.

Q. Why was the footnote necessary, Professor? Why did you combine Pan American and Panagra?

A. Essentially we combined it because of the through- [fol. 660] flight agreement, the joint ownership involved in

Panagra. It is a little hard to tell whether you should count it as 2 or 3 or 2½.

Q. Was this your own idea, Professor?

A. Yes, sir.

Q. Professor, I would like to turn to your Exhibit 405 in which you list the volume of air passenger traffic between the United States and foreign cities served by two or more U. S. flag carriers for the year 1957. Have you that before you, Professor?

A. Yes, I do.

Q. Let me ask you whether there are any other foreign points not listed on your exhibit which in that year were served by two or more U. S. carriers, if you know?

A. I think that we tried to put them all in in here.

Q. To the best of your knowledge and belief all such cities are in there.

A. I believe so, yes.

Q. According to your testimony, Professor, the right-hand column on that exhibit breaks down the number of passengers on a number-of-passengers-per-carrier basis; is that a fact?

[fol. 661] A. That's correct.

Q. And in your testimony you took as an example the first line with respect to Nassau and the Bahamas; is that correct? Do you recall that?

A. Right.

Q. And you stated that each of the two carriers, and I quote, "has an average of 86,000 passengers per year to and from the United States." Do you recall that testimony, Professor?

A. Yes.

Q. Do you know that two U. S. carriers were serving Nassau in 1957, Pan American and Mackey Airlines?

A. Yes.

Q. Do you mean to imply that the traffic was divided equally between Mackey and Pan American?

A. No, I don't believe I so stated.

Q. Do you know what the division of the traffic was?

A. At Nassau? Not offhand, no.

Q. What did you mean to imply by this 86,000? Was it just an arbitrary division by two?

A. Essentially, yes.

Q. Professor, your Exhibit 106 is designed, is it not, to [fol. 662] show the comparative development of air passenger traffic between the United States and South America and between the United States and other areas in the world; is that correct?

Q. Isn't it true, Professor, that there are many other factors besides gross national product which might be used to measure the comparative development of air passenger traffic?

A. Yes, there are certainly others.

Q. Can you name some of these other indicators, as I think you referred to them?

A. Well, I suppose that if you did enough adjusting, for example, of types of commodities there would be some correlation perhaps between foreign trade and passengers. But this would have to be pretty carefully adjusted and either in terms of tonnages, which certainly isn't too meaningful, or in terms of dollars which may not be too meaningful either.

Q. Have you any other indicators that you could specify besides foreign trade?

A. As an indicator of the number of passengers?

Q. Yes. To be used along the lines that you used the gross national product.

A. I suppose that you might run this out on the basis [fol. 663] of resident aliens in the United States or first place of birth of the naturalized citizens to get some kind of a relationship.

Q. Any other indicators, Professor?

A. None that occur to me offhand.

Q. Isn't it true, Professor, that gross national product fails to take into account important factors affecting the potential air passenger traffic which may be developed in certain areas? Yes or no in the first instance, Professor, if you can answer it yes or no.

The Witness: Could you read the question again?

(Question read.)

A. Well, aside from the point of tourist attractions—

Q. First, Professor, can you answer it yes or no?

A. I don't think I can, no.

Q. Would you say, Professor, that the gross-national-product criterion, as you use it, takes into account all important factors?

A. All of the basic economic factors.

Q. Is that the only standard or criterion that takes in all such factors, in your opinion, Professor?

[fol. 664] A. I think it is probably the best single economic indicator.

Q. Professor, is gross national product an adequate standard, for example, in measuring the traffic potential of the Bahamas which your Exhibit 105 indicates to be a top traffic generator?

A. You mean because of the tourists?

Q. I am just asking the question, if you would please respond to it, Professor.

A. I think not, no.

Q. For example, Professor, doesn't gross national product fail to take into account the closer ties and greater community of interest between the United States and South America as compared with other areas of the world?

A. The closer ties to South America?

Q. And the greater community of interest between the United States and South America as compared with certain other areas of the world.

A. Well, I am not at all sure the ties are closer or the community of interest greater than with some of the other areas.

Q. Does it take into consideration, however those two [fol. 665] factors?

A. Probably not.

Q. Professor, would not the amount of American investment abroad be an appropriate measure of the potential passenger traffic between the United States and various areas, in your opinion?

A. It would be one indicator.

Q. Would not the total amount of trade moving between the United States and a particular area be an appropriate measure of potential passenger traffic?

A. Not in gross, no.

Q. Pardon me?

A. Not either in gross dollars or gross tons, I would think.

Q. In any respect, Professor.

A. If you analyzed it down to particular types of trade and particular commodities, you might get a pretty good correlation.

Q. Professor, when you used this standard or criterion, gross national product, did you have to make any adjustments? Or does that automatically apply and get the result?

You were indicating previously that you might use this indicator or that; you have to make certain fine adjustments. Did you have to make any adjustments when you [fol. 666] used the gross national product?

A. No, I believe not.

Q. You just used it as an absolute.

A. As I recall, yes.

Q. Professor, would you think that the gross national product might be a good standard to be applied to countries such as India which has a very high per capita?

A. For measuring potential air traffic?

Q. Yes.

A. I think it would be reasonably good, yes.

Q. Do you know what the average income is? Have you any idea of the average income of the people of India?

A. It is low.

Q. It is very low, isn't it, Professor?

A. Yes, it is.

Q. But you regard this class of very low income traffic as potential passenger traffic on international routes?

A. We aren't talking about per capita income here. We are talking about gross national product.

Q. But you do say that the gross national product standard would be, in your opinion, the standard to be [fol. 667] applied in the case of a country like India?

A. I think it would be a good indicator, yes.

Q. The best you know?

A. Probably.

Q. Have you any doubts, Professor?

A. No.

Q. Professor, I have handed you a copy of Grace's Exhibit 179 for identification. This exhibit sets out the total export and import trade moving between the United States and the three areas listed in your Exhibit 106. The figures contained in this exhibit have been taken from the statistical abstract of the United States for the year 1958, and the figures are for the year 1957. If we were to take total trade as a measure of potential passenger traffic, wouldn't this exhibit demonstrate that air passenger traffic between the United States and South America is comparatively less developed than the traffic between the United States and Europe and that it has reached approximately the same stage of development as the traffic between the United States and Australia and Asia in your Exhibit?

[fol. 668] A. If you wanted to make this comparison this way, but your trade with South America is a very different kind of trade than it is with Europe, with most of the imports from South America being bulk commodities such as petroleum, ores and one thing or another, which I would say is not at all comparable to the type of freight that we have with Europe.

Q. In other words, Professor, is it your testimony that the only standard or criterion that you can use absolutely, without considerations of various factors of type of trade, is the gross national product?

A. I would say that that was the best single indicator.

Q. Without any adjustments being required or refinements such as you have indicated in certain of the other standards or criterion?

A. Generally speaking, yes.

Q. Professor, in your Exhibits 101 and 102 you have made some comparisons between the United States carriers serving South America and the domestic local service carriers; is that correct?

A. That is correct.

Q. Would you turn to your Exhibit 107 which compares the operating ratio of the domestic trunk line carriers with [fol. 669] the United States carriers serving South America—is that correct?

A. Yes.

Q. Your Exhibit 107, Professor, gives no indication of

the operating ratio of any of the domestic local service carriers, although you considered the traffic density on their routes relevant in the earlier exhibits, namely, 101 and 102; is that correct?

A. That is correct.

(Marked Exhibit WRG-180 for identification.)

Q. Professor, with Grace's Exhibit 180 for identification before you, I would like to point out that it compares with the figures contained in your Exhibit 107, the operating ratios in 1956 and 1957 for the five domestic local service carriers which, according to your Exhibit 102, had the greatest density of traffic on their routes. Do you see that, Professor?

A. That's right.

Q. It is true, is it not, Professor, that the operating ratio of these five carriers is very substantially above the operating ratio in 1956 and 1957 of Panagra?

[fol. 670] A. That is correct.

Q. This difference would indicate, would it not, Professor, that factors other than traffic density are of importance in comparing the economic strength of carriers?

A. Of carriers, yes.

Q. It is also true, is it not, Professor, that local service carriers are very heavily subsidized?

A. That is correct.

Q. In preparing your Exhibit 107, Professor, did you at any time ascertain what the operating ratio was for the local service carriers?

A. Not that I recall, but we knew—from my general knowledge I knew it was high.

Q. You decided not to explore that and put that in your Exhibit 107?

A. I did not think it was particularly pertinent.

Q. Professor, let us turn to Exhibit 108 where, in comparing rates of return, you have eliminated not only the local service carriers but the domestic trunk line; is that correct?

A. That is correct.

[fol. 671] (Marked Exhibit WRG-181 for identification.)

By Mr. McKay:

Q. Professor, with Grace's Exhibit 181 for identification before you, I would like to point out that that exhibit takes the rates of return shown in your Exhibit 108 and compares them with the rates of return for domestic trunk lines and local service carriers, this as reflected in the quarterly report of the air carriers' financial statistics for the CAB for December, 1957.

Now, Professor, it appears, does it not, the rate of return in 1956 and 1957, even for the domestic, even for the domestic trunk lines with their very high traffic density, is on the order of that shown by you for the Pan American Latin-American Division and Panagra? Is that correct, Professor?

A. According to these figures I am not sure whether these particular trunk operations reflect the adding back of interest or whether they are as reported.

Q. All right, Professor. Apart from that one factor, can you answer my question, or with that reservation?

[fol. 672] A. That is correct.

Q. Did you at any time, Professor, in preparing the material appearing in your Exhibit 108, consider the rates of return for the domestic trunk lines and domestic local service carriers?

A. In connection with 108?

Q. Yes. Did you consider?

A. I think not, no.

Q. Professor, is the net profit in investments shown by you with respect to the Latin-American Division of Pan American necessarily or indeed in fact the same as that considered by the CAB for subsidy purposes, if you know?

A. I don't know what they would consider.

Q. Do you know what you considered, Professor?

A. Yes.

Q. What is included in that investment figure?

A. It is explained on the footnote on the following page. The average quarterly balance is of net worth, long-term debt and notes payable, and in the case of divisional carriers which have various divisions the total system investment has been prorated on the basis of divisional operating expenses.

Q. Now, Professor, as an expert in this field you know, [fol. 673] for instance, that the Civil Aeronautics Board will not take into consideration equipment which they regard as affording excess capacity, do you not?

A. That is correct.

Q. And there are many other items covered by company investments which the CAB has from time to time disallowed?

A. Yes.

Q. Professor, would you turn to that Exhibit 108, page 2. The second footnote refers to a decision of the Civil Aeronautics Board in Docket No. 1706 as finding that a 10 per cent return was reasonable with respect to the operations of Pan American. Do you see that?

A. Yes.

Q. You know, do you not, that the decision established a 10 per cent rate only for the period until December 31, 1953; is that not correct?

A. That is correct.

Q. And thereafter the rate established by that decision was not ten but, rather, 9 per cent?

[fol. 674] A. That is correct, and I believe I so testified.

Q. Your exhibit does not so show, however, does it, Professor?

A. No, sir.

Q. Aren't you also aware, Professor, that the reason for reducing the rate for the more recent years was, in the Board's own words, and I quote, "the lesser risks of the more mature, well-established international industry," if you know, Professor?

A. I don't recall.

[fol. 675] Q. Professor, would you turn to your Exhibit 115 where you describe the route structure and schedules assumed in connection with your Exhibits 114 through 129. Have you those before you, Professor?

A. Yes.

Q. I note, Professor, that under Assumption 1 in paragraph B in Exhibit 115 there is assumed the extension of Pan American to the west coast of South America in accordance with the application it has made in Docket No. 8597. Do you see that, Professor?

A. That is correct.

Q. Are you aware of the fact, Professor, that W. R. Grace and Co. has filed an application on behalf of Panagra in Docket Nos. 8511 and 8512 for an extension of Panagra's route from Balboa to New York and from Balboa to Los Angeles and San Francisco?

A. I am generally familiar with that, yes.

Q. The extension applied for in behalf of Panagra is not that which has been assumed in your exhibit, is it, Professor?

A. I am sorry?

Q. I say the extension applied for on behalf of Panagra by W. R. Grace and Co. is not the extension you are talking about, the application you are talking about in your Ass[umptions] No. 2.

A. No, we just covered the extension of Panagra from Balboa to Miami.

Q. And your Assumption No. 2 was the extension of Pan American down the west coast of South America; is that correct?

A. That is correct.

Q. You made no third assumption, did you, Professor, in any of your studies?

A. No.

Q. Were these route pattern assumptions which are set forth in 115 made by you, or were they determined or suggested by Pan American?

A. As I recall, we proposed them and we discussed them with the Pan American people.

Q. When you were retained, Professor, did a representative of Pan American explain to you what this antitrust case was about, what the issues were?

A. I already knew of the pendency of the case. I don't recall that they explained the issues.

Q. Well, is it your understanding that there is an issue in this case Pan American's application for an extension of its route down the west coast of South America? [fol. 677] A. Pending in this case?

Q. Yes.

A. No, I don't think it is.

Q. Professor, why did you make Assumption No. 2? You said you proposed it to Pan American, had a discus-

sion, and then you went forward with your study and you prepared these exhibits or they were prepared under your general supervision. I am asking you why you proposed Assumption No. 2 to Pan American.

A. We wanted to show essentially the effects of additional competition within this general area of South America.

Q. And you just used this as one possible example, is that correct?

A. That is correct.

Q. Did you at any time, Professor, consider using as a basis for an assumption, either a third, an additional one or not, the extension of Panagra's route from Balboa to Miami and to New York?

A. In running up these studies?

Q. Yes, Professor.

A. We may have. I am sure we didn't seriously consider them.

Q. When you say "We may have," Professor, give your [fol. 678] best recollection.

A. My recollection is that we considered it and picked out as Assumption No. 1 Balboa-Miami.

Q. You did consider, however, the extension of Panagra's route from Balboa to Miami to New York, or did I mishear you?

A. Well, I really—

Mr. Peck: May I interrupt for a moment, Mr. McKay, to find out whether you understand that Assumption No. 2 includes the extension of Panagra from Miami to Balboa? You understand that, don't you?

Mr. McKay: I do, Judge Peck.

Q. Proceed, Professor, if you will.

A. I really don't recall the extent to which we considered this doing our study on the basis of the Miami-New York extension as well as Miami-Balboa.

Q. You do not recall.

A. I don't recall that, no, sir.

Q. Have you any recollection, Professor, that you considered the extension of Panagra up the west coast of the United States in accordance with the application filed on its behalf by W. R. Grace and Co.?

A. We had not considered that.

Q. Now, Professor, in this Exhibit 115 you made certain [fol. 679] scheduling assumptions, did you not?

A. That is correct.

Q. Did you determine those assumptions, or did Pan American?

A. We did.

Q. And would that hold true as to the assumptions regarding routing?

A. Yes.

Q. Professor, I would like to have you focus your attention on Assumption No. 1 for the moment, that is, the extension of Panagra's route to Miami. Is it not true that the route pattern assumed here as a major assumption that Pan American would institute seven round trips a week?

A. They would operate seven trips a week between—round trips between Miami and Balboa.

Q. Professor, is it your expert opinion that Pan American could not operate on this route without having seven frequencies a week?

A. Well, operationally they could have more or less. This was our best judgment as to what they would offer if they were going to stay on the route and compete for the local traffic.

Q. If they were to stay on the route and compete, is it [fol. 680] your opinion that they could not have less than seven frequencies a week?

A. It was our opinion they could not have less than seven frequencies and still maintain any kind of competitive strength against Braniff and Panagra.

Q. They would go out of business if they did not have seven frequencies a week?

A. They would tend to lose whatever local traffic there was and to which they were entitled as they scaled down their frequencies. At what point it would pay them or make it necessary to give up the route altogether, I really don't know.

Q. You can't say that they couldn't operate with six or five.

A. We think they could not from a competitive standpoint.

Q. Isn't it true, Professor, that there are instances in which a carrier offers less than seven frequencies in a route on which it faces U.S. flag competition? If you know, Professor.

A. There may be such cases.

Q. Do you know of any?

A. I don't think of any offhand, no.

[fol. 681] Q. Isn't it true, Professor, for example, that on your own Exhibit 115, if you will turn to page 4, that there are many competitive points between which Braniff offers only two frequencies a week?

A. Is this page 3 you are speaking of?

Q. 4, Professor.

A. Under the assumptions or under the present?

Q. Under the actual, Professor.

A. Yes, that is true. But this is quite different traffic that we are talking about here than the local traffic between Balboa and Miami.

Mr. McKay: I move to strike the latter part of the answer, your Honor.

The Court: It doesn't matter.

Q. Professor, it is true, is it not, that the assumption that you made, and it is your own assumption, of seven frequencies per week for Pan American is a substantial factor in your projection of subsidy needs?

A. Yes, it is.

Q. And it is correct, is it not, Professor, that the statutory criterion for the award of subsidies, as set forth in Section 406(d) of the Act, is the need of a carrier "under [fol. 682] honest, economical and efficient management to develop air transportation"? Is that correct, Professor?

A. That is correct.

Q. Under that statutory criterion the Board has on many occasions eliminated expenses incurred by carriers as, for example, in the operation of excess capacity; is that correct?

A. Usually not right after they have certificated a third carrier.

Q. That is correct, Professor, if you will be responsive to my question: Have they or have they not?

A. Made disallowances?

Q. Yes, yes.

A. They have.

Q. I would like to refer again, Professor, to the Civil Aeronautics Board decision in Docket 4882. You are aware, are you not, that the Board said in that decision at page 33 that if traffic volumes did not increase substantially air service capacity can and should be reduced so that an economic load factor will be obtained. Do you recall that?

A. I don't recall it specifically, no.

Q. Do you disagree with it?

[fol. 683] A. Do I disagree that they said it?

Q. No, do you disagree with the thought behind the statement?

A. As applied to that particular instance, probably not.

Q. To the particular instance in that docket?

A. That is correct.

Q. The CAB went on to say:

"We hereby stress the need for a careful monitoring by all carriers of schedules and services to be flown to South America, for we have been forced several times in the past to refuse to underwrite with subsidy support large amounts of excessive capacity operated by the South American System of Pan American."

Do you recall that statement?

A. No, I don't.

Q. Do you recall Mr. Ferguson's testimony in this case that, if Pan American had operated on a daily frequency between Miami and Balboa, the Civil Aeronautics Board would have found that Pan American "had operated excessive capacity" and that "the Board would not support this service."? Do you recall his testimony to that effect?

[fol. 684] A. I don't recall the period. I don't know that I do recall that testimony now.

Q. Do you agree with Mr. Ferguson's statement, Professor?

A. You would have to give me the year or the period.

Q. Let me show you the transcript, Professor. Read that question and answer at the bottom of page 451 to the top of page 452.

I was just referring to that one particular question and answer, Professor, at the bottom of 451 and going over to 452.

A. Yes. Well, I was trying to identify this with what period he was talking about and in what connection.

Q. It is my understanding, Professor, he was talking about the period covered by his exhibits up to 1945.

A. Without any competition, if there is no competition over the route, and the loads are very light, then I think probably the Board might very well have disallowed them. If the Board itself has certificated competition, it seems to me to change the facts quite a bit.

[fol. 685] Q. Professor, what about the period from 1945 up to the present time? Your study has covered, as I understand it, while your exhibits don't portray the results of those studies except for one year, 1957—

A. And what is the question?

Q. Well, would Pan American, in your opinion, if it operated the daily frequency that you assume that it would, namely seven frequencies a week, in competition with Panagra—

A. And Braniff.

Q. —and Braniff, be subsidized by the Civil Aeronautics Board?

A. For those seven trips? I think that is a reasonable assumption.

Q. Isn't it true, Professor, that, if Pan American had either instituted a lesser frequency on this sector or if it had abandoned that service, the consequences you predict under Assumption No. 1 would no longer follow?

A. They couldn't abandon without the Board's permission.

Q. Obviously, Professor, if they had abandoned it with the Board's permission.

A. Well, we would have to rerun the numbers to see what [fol. 686] the effect would be.

Q. It would be in your opinion, would it not, substantially different, Professor?

A. I think, if you simply substitute Panagra for Pan Am on the route, the results would obviously be quite different here.

Q. Your study does not show, Professor, does it, that there would be any economic detriment either to Panagra or to the general public if Panagra was substituted for Pan American on this route?

A. And Pan Am's certificate was lifted or suspended?

Q. Yes, Professor.

A. We didn't go into that.

Q. It is true, Professor, is it not, that the bulk of the traffic presently moving on the Miami-Balboa sector is through-traffic moving to and from points served by Panagra?

A. A considerable volume is, yes.

• (Paper marked Defendant W.R.G. Exhibit 182 for identification.)

Q. Professor, with Grace Exhibit 182 for identification before you, this summarizes certain figures which were derived from your Exhibit 116. It is true, is it not, that [fol. 687] that exhibit, Grace's Exhibit, correctly shows that in the year 1957 the local traffic between Balboa and Miami was between eighteen and nineteen million revenue passenger miles, whereas the through traffic was somewhat in excess of 49 million revenue passenger miles? Is that correct?

A. That is correct.

Q. Do you agree with Mr. Ferguson, Professor, that, if Panagra secured its own route between Miami and Balboa, it would have been impossible for Pan American to secure any significant amount of this through traffic?

A. We made that assumption. I think probably they would get a little.

Q. Not a significant amount.

A. That is correct.

Q. Did you, Professor, take into account in your Assumption No. 1 that Pan American, in offering local service between Balboa and Miami, might adopt routes which would enable it to serve points intermediate between Miami and Balboa?

A. No, we did not.

Q. You know, do you not, that until 1953 Pan American operated flights which were routed Miami, Camaguey, [fol. 688] Kingston and Balboa?

A. Yes, I am generally familiar with that.

Q. And in 1955 Pan American operated flights routed Miami, Kingston, Balboa.

A. I will take your word for it.

Q. And that presently Pan American is operating a flight which is routed Miami, Managua, San Jose and Balboa. They are taken from the official Airline Guide, Professor, in May, 1959.

If Pan American adopted one or more of these routings for some or all of its Miami-Balboa service under Assumption No. 1, that might increase its passenger traffic and passenger revenues, might it not?

A. I would guess that with the through flights by Panagra and Braniff they would then lose the share of the local traffic that we have given them.

Q. Professor, you said you guessed. Have you any basis for your opinion? Are you able to give us your opinion rather than a guess?

A. My opinion is they would lose a substantial amount of the local traffic, that is, the local Miami-Balboa traffic.

Q. But they would pick up other passenger traffic, would [fol. 689] they not?

A. Presumably.

Q. And you are not able to say whether they would come out ahead or not, are you?

A. No, I am not.

Q. Professor, turning to your Exhibit 114, which summarizes your conclusions with respect to Assumptions 1 and 2, it indicates, does it not, that for the year 1957 under Assumption 1 you conclude that Panagra would have suffered an "added operating loss" of \$319,000? Do you see that, Professor?

A. That is correct.

Q. That exhibit further indicates that your conclusion is that this operating loss combined with a \$400,000 loss of interchange income and a \$256,000 added requirement for return on investment would have required an addi-

tional subsidy for Panagra of \$975,000 for that year; is that correct?

A. That is correct.

Q. Turning first to the item designated "Return on investment," this figure is based, is it not, on a 9 per cent return on the additional investment which you estimate Panagra would be required to make in order to provide the [fol. 690] additional service under Assumption 1?

A. That's right.

Q. Professor, isn't it true that this 9 per cent return is more than three times the return which Pan American has actually earned on its investment during the period 1947 to 1957 as shown by your Exhibit 108?

A. 9 per cent is higher than the actual return, yes.

Q. And the actual return was what, Professor? My figures show it was more than three times.

A. Well, the actual return is 4.8 over the 1947 to 1957 period, so 9 is a little more than twice 4.8.

Q. You say it was 4.8 for the period 1947 to 1957? I was talking of Pan American.

A. Oh, Pan American. I am sorry, yes.

Q. It is more than three times, Professor, the 9 per cent.

A. That is correct.

Q. Isn't it also true, Professor, that this 9 per cent which you have used is nearly twice the return which Panagra has earned on its investment during that same period as shown by your Exhibit 108?

[fol. 691] A. That is correct.

Q. Professor, why do you assume that Panagra and Pan American must earn on the new investment, which would be required under your assumptions, more than they are earning on their present investment?

A. Because, generally speaking, the 9 per cent return has been declared by the Board to be a reasonable rate of return for this kind of operation.

Q. So you have used this 9 per cent rather than the actual rate experienced by Pan American and Panagra.

A. That's right.

Q. Solely because the Board as found it to be a reasonable rate of return.

A. That's right.

Q. Professor, turning to what you call the added operating loss of \$319,000 which you conclude Panagra would have suffered, isn't it a fact that Panagra made an operating profit in the year you were talking about, 1957? I am puzzled by your description of "added operating loss." It had been my understanding, and Mr. Ferguson so testified, that in that year Panagra had an operating profit.

[fol. 692] A. Well, I think that is correct.

Q. That is an error in your exhibit, then, Professor?

A. If you wish to interpret it so, yes.

Q. So, if your estimate is accurate, Professor, it would rather be a reduction in operating profit, would it not?

A. You might phrase it that way, yes.

Q. You wouldn't object if it was phrased that way, Professor, would you? How else could it be phrased, Professor?

A. Change in operating result.

Q. There is nothing wrong in referring to the word "profit," is there?

A. No.

Q. Isn't it a fact, Professor, that the accuracy of your estimate depends on the accuracy both of the operating revenue estimate set out on your Exhibit 127 and also on the accuracy of each of the operating expenses set out in that exhibit?

A. The 319 figure depends on that, yes.

Q. Turning first to your estimate of revenue for Panagra in 1957 under Assumption No. 1, have you taken into account the increase in total traffic which might be expected [fol. 693] to result from the operation of additional competitive services?

A. I am sorry; I don't know that I understand your question.

Mr. McKay: Would you read the question back, please?

(Question read.)

A. I think not, no.

Q. Professor, you assume, do you not, that Panagra under this Assumption No. 1 would establish additional sales offices throughout the country at a very substantial expense? Is that not correct?

A. That is correct.

Q. Have you taken into consideration in connection with this assumption that the addition of these sales offices and the additional promotional activities might result in an increase in traffic?

A. No. We have—

Q. Yes or no, if you can, please.

A. No.

Q. Are you familiar, Professor, with the statement of the Civil Aeronautics Board in Docket 4882 where, in discussing the desirability of a Braniff/Eastern interchange providing service between western South America and New York, [fol. 694] they stated:

"The stimulus derived from more effective competition should in this instance have a promotional effect on total traffic carried by these carriers, so that the overall effect of our action may not be merely to transfer traffic from one carrier to another but to increase the total traffic of both and thus to decrease total mail pay support for both carriers."?

My question, Professor, is whether or not you are familiar with that statement.

A. No, I am not.

Q. Do you agree with the statement, Professor, generally speaking?

A. I don't know that I would agree with that, no.

Q. You would disagree with it, Professor?

A. I think I would, yes.

[fol. 695]. (Cross examination (continued)).

By Mr. McKay:

Q. Professor, turning now to the non-passenger revenues in your Exhibit 118, that exhibit indicates, does it not, Professor, that you have used Braniff's experience ratio of non-passenger to passenger revenues in determining what Panagra's non-passenger revenues would be?

A. That is correct.

Q. Your source, Professor, for the Braniff ratio was indicated in PS-118 to be the Form 41 reports to the CAB; isn't that true?

A. That is true.

Q. Isn't it a fact, Professor, that Panagra's filed Form 41 indicates that the ratio of non-passenger revenue to passenger revenue in 1957 was 26 per cent?

A. I don't know.

Q. You never checked it, Professor?

A. I beg your pardon?

Q. You never checked it?

A. I didn't, personally. As far as I know—

Q. Did any member of your staff, who worked under your close general supervision, Professor, check it?

A. I would—yes.

[fol. 696] Q. Pardon me?

A. Yes.

Q. You know that to be a fact, Professor?

A. Yes.

The Court: Do I understand the import of your question, Mr. McKay, that the actual 41 report filed by Panagra showed—

Mr. McKay: 26 per cent.

The Court: And not something like 16?

The Witness: Oh, I'm sorry. I thought you asked about Braniff.

Q. No, Panagra.

A. Well—

Q. You used the Braniff ratio, as indicated in their Form 41 report; you said yes; is that correct?

A. That is correct.

Q. Now, I asked you if you had checked, or any member of your staff checked Panagra's Form 41 to see what its ratio was?

A. I am sure they did.

Q. Did you, Professor?

A. I did not.

Q. Did any member of your staff do it?

A. Yes.

[fol. 697] Q. You know that to be a fact?

A. I believe it to be a fact.

Q. You don't know what ratio was shown in Panagra's Form 41, however?

A. I don't know.

Q. You have no idea?

A. No. We used this because of Braniff's—the fact that Braniff operates both north and south of the Canal.

Q. Well, accepting, if you will, Professor, the 26 per cent figure, and you can check that from the work sheets of your members of your staff whom you say did look at Form 41 for Panagra, it is true then that Panagra's experience ratio was 50 per cent higher than Braniff's?

A. South of the Canal, yes.

Q. And this reflects Panagra's greater volume of freight and domestic and foreign mail, does it not?

A. Foreign and domestic mail?

Q. Yes.

A. Foreign and U.S. mail moving overseas?

Q. Yes.

A. I don't know whether it would be greater or not.

[fol. 698] Q. Professor, if you had used Panagra's actual experience rate, its non-passenger revenues would have been \$421,000 more than those shown for 1957 in your Exhibit 118, would it not?

A. If that would have been an applicable figure to this Miami-Balboa sector. We felt that the Braniff experience was somewhat more applicable.

Q. Professor, turning now to your computation of expenses on Exhibit 127, it shows for 1957, under your route assumption No. 1, a flying operation expense of \$1,539,000; correct?

A. Correct.

Q. And that was computed by multiplying the increased mileage required by the proposed route extension by the per mile flying operation expense for Panagra for DC-6s and 7s, as set out in your Exhibit 121.

A. That is correct.

Q. Now Exhibit 12 indicates, doesn't it, Professor, that you have assumed that it would cost Panagra 88.14 cents per revenue mile to operate 6s in '57, whereas it would

only cost Pan American 75.88 cents per revenue mile to operate the same plane over the same route in the same year; isn't that correct?

[fol. 699] A. That is correct.

Q. Professor, what is your basis for assuming that the flying operation expense for Panagra would be substantially in excess of that for Pan American for the same plane over the same route, for the same year?

A. Our figures in PS-127 are based on Panagra's reported costs in '57.

Q. Well, now, Professor, in computing these flying operation costs per revenue mile for Panagra, have you taken into account the difference in cost between operations over the Miami-Balboa sector, and operations within South America?

A. Well, the basis that we had to go on was Panagra's reported cost, as I indicated.

Q. I ask you, Professor, if you had taken into account the difference in cost between operations over Miami-Balboa sector and operations within South America? I would think you could answer that yes or no.

A. We had no basis for using any other figure than the purported cost.

Q. The answer then, Professor, is no; correct?

A. Correct.

[fol. 700] Q. Thank you. Did you take into account, Professor, the difference between, say, the cost of gasoline in South America and the cost in Miami?

A. We had no basis on which to—

Q. Professor, will you please answer that yes or no, unless you say you cannot answer it yes or no? Did you or did you not?

A. We considered that.

Q. Did you take it into account?

A. We did not.

Q. Isn't it also true, Professor, that in Exhibit 121, in computing maintenance costs for operating DC-7s, you have assumed that it would cost Panagra 69.58 cents per mile, but that it would cost Pan American only 50.91 cents per revenue mile for the same planes over the same route; is that correct?

A. We did, based on Panagra's experience.

Q. And if I were to ask you the same questions as to whether you took into account various other factors on the difference in costs and operations on the west coast of South America as distinguished from the Miami-Balboa, would your answers be the same, Professor?

A. We considered some upward and some downward [fol. 701] adjustments in these costs, and concluded that we should use Panagra's experience, because we had no firm basis for making these adjustments.

Q. Even though, Professor, you appreciate that there are differences in cost in operation within South America as distinguished from operations over the Miami-Balboa sector?

A. And for this segment, some of those are increased and some of those are decreased costs, as against the present situation.

Q. And you weighed them, the increases and the decreases, and you did make that study, Professor?

A. Yes.

Q. Of those computations. Can you tell us now just how you came out, what those computations were?

A. Well, the principal ones are between the gasoline on the Miami-Balboa segment, and the station expenses at Miami and Balboa.

Q. Any others?

A. Not that I recall. Those were the principal ones, and these apparently would just about wash. In other words, the gasoline would be somewhat cheaper when bought at Miami. On the other hand, there would be increased station expenses at Miami and Balboa, and we [fol. 702] essentially washed one against the other and relied on Panagra's reported experience.

Q. What about the difference in cost and maintenance in South America as distinguished from Miami; did you take that into consideration, Professor? Yes or no?

A. No.

Q. Professor, turning next to the item of \$968,000, which you show as added reservation and sales cost for Panagra 1957, under route Assumption No. 1, that is Exhibit 127, that is, that figure is based on the assumption, is it not, that

Panagra would replace its sales agency arrangement with Pan American with an extensive ticket office program; which would result in a projected expense of \$1,169,000; is that correct?

A. Less the commissions they now pay Pan American.

Q. Now, Professor, if Panagra either continued its sales agency relationship with Pan American, or entered into a similar arrangement with some other air carrier, such as National or TWA, this expense would not be incurred? Isn't that a fact?

A. That is correct. That is the net figure.

Q. They would not incur this additional expense, Professor; is that correct?

A. The additional over and above the commissions.

Q. Yes, Professor, is that correct?

A. That is correct.

Q. Thank you. Would you say the choice of sales arrangement is a matter solely within the business judgment of Panagra's board of directors, whether to set up this elaborate sales office program, that you assumed they would, rather than to enter into an arrangement similar to the one they have with Pan American and some other airline?

A. I think the board would make you set these up or make you set up some different kind of arrangement than what you have now.

Q. Do you know whether the board would so require, Professor?

A. No, but generally speaking, where competitors are involved, they don't permit these general sales agency arrangements.

Q. Would you say that TWA is a competitor of Panagra?

A. A competitor of Panagra?

Q. Yes.

[fol. 704] A. No.

Q. Thank you. Turning next, Professor, to the item of \$411,000 for additional advertising, isn't that based on your assumption that Panagra will spend, in addition to its present advertising expense, the same percentage of its new revenues which it now spends of its present revenues?

A. It certainly is.

Q. Isn't it quite possible that Panagra's board of direc-

tors will not choose to spend this percentage of its new revenue for advertising?

A. We feel they would be foolish to so choose.

Q. That is your personal opinion, Professor?

A. Yes, sir.

Q. Professor, since the proposed route extension is over a route which Panagra is already serving and advertising, isn't it quite possible that Panagra might find it necessary to spend little if any additional money on advertising in connection with this proposed route extension?

A. We felt that if they wanted to generate this traffic, that they would essentially maintain the percentage level of their advertising as applied to this new revenue.

[fol. 705] Q. Now, Professor, with respect to general and administrative expense in Exhibit 127, that exhibit indicates, does it not, that you have assumed this category of expense would have increased for Panagra in '57 under Assumption 1 by some \$453,000; correct?

A. Correct.

Q. That is based on the assumption, is it not, that this expense would maintain the same percentage relationship to total cash expenses as it has in the past.

A. That is correct.

Q. Isn't it likely, Professor, that many of the expenses under this category will not increase at all by a change from a through flight operation to an operation by Panagra over its own route between Miami and Balboa?

A. We felt otherwise, based on what seems to be the general trend in the industry, that as volume and so on builds up, this expense ratio tends to be pretty much constant.

Q. Well, you will agree with me, Professor, would you not, that each of the items of expense in Exhibit 127 is based on a series of assumptions; correct?

[fol. 706] A. On assumptions and Panagra's reported experience.

Q. And these assumptions that you made, they may not correspond with actual experience under the proposed route extension; you will agree with that, will you not, they may not correspond with actual experience under the proposed route extension?

A. That is correct.

Q. Professor, it is true, is it not, that your Exhibits 114 through 129 relate to only one possible route extension of a number for which Panagra might apply and which might be granted to it.

A. That is correct. The other seemed even less attractive from an economic point of view, as far as we could see.

Q. Did you, Professor—I believe I asked you this earlier—did you make any studies of the proposed route extension of Panagra up the west coast of the United States?

A. Not a detailed study, no.

Q. Professor, can you say in your expert opinion that there is no possible route structure which might be offered, which would result in Panagra's coming to the United States and which would not require additional subsidy?

[fol. 707] A. All other things being equal?

Q. Yes, Professor.

A. At the present time, I think it is hard for me to conceive, conceive of this.

Q. But you couldn't say and give your expert opinion that there is no possible route structure which might be offered, which would result in Panagra's coming to the United States, and which would not require additional subsidy?

A. At the present time, I think not.

Q. Professor, as I understand the ultimate conclusion to which these Exhibits 114 through 129 are directed, is that the particular extension of Panagra's route which you have considered would not be economically desirable; is that correct?

A. That is correct.

Q. But you do not suggest that it would be economically impossible, do you, Professor?

A. With additional subsidy?

Q. With or without?

A. With additional subsidy. I think it would be possible.

Q. Would you say it was economically impossible without [fol. 708] additional subsidy?

A. I would say so, yes.

Q. Professor, you recognize that the Civil Aeronautics Board and the President have exclusive jurisdiction in awarding routes and needed subsidy support, do you not?

A. Yes.

Q. You also recognize, Professor, do you not, that since the enactment in 1938 of the Civil Aeronautics Act, competing routes may be and have been authorized, although this required additional subsidy?

A. Yes.

[fol. 711] PAUL W. CHERINGTON, resumed.

Redirect examination.

By Mr. Peck:

OFFERS IN EVIDENCE

Q. Professor Cherington, would you refer to Grace Exhibit 176 which was introduced on your cross-examination.

The Court: It was marked for identification.

Mr. Peck: Yes, it was marked.

Mr. Kenney: For identification only.

Mr. McKay: I will offer them in evidence. I marked them for identification merely as an aid or for assistance to the witness, the Court, and myself. I am willing to offer them in evidence, if there is no objection. Otherwise I will leave them for identification, if there is objection.

Mr. Kenney: No objection from the Government.

Mr. Peck: It doesn't make any difference to us one way or the other.

Mr. McKay: I will offer them in evidence.

The Court: Let's consider them in evidence, and the Clerk will mark them later.

(W.R.G. Exhibits 174 to 182 for identification received in evidence.)

[fol. 712] The Court: Do you want the witness to look at Exhibit 176?

Mr. Peck: Yes, I would like the witness to look at 176, if your Honor please.

A. Yes, sir, I have it.

Q. I would like to call your attention to the item of revenue passenger miles per route miles per day for Northwest

Airlines, that figure of 53.6. I want to ask you whether that figure, 53.6, represents the density of traffic over that route, and by the route I mean between the United States and the Orient.

A. Well, it does not include the Pan American traffic which is carried on the route at present.

Q. And what is the Pan American traffic on that route? Can you tell us that?

A. No, sir, I don't have that figure. But it is my understanding that Pan American has as much or, if not, a good deal more traffic than does Northwest.

Mr. McKay: Judge Peck, would you permit one interruption which perhaps is an error on our part? When we were referring to Northwest, we were referring to Northwest Airlines. We should have inserted that word. I don't know whether that will clear up the situation. It may not. But—

[fol. 713] Mr. Peck: I understood that you were referring to Northwest Airlines, yes.

By Mr. Peck:

Q. In other words, that represents the density on Northwest's route alone; is that correct?

A. So I understand, yes.

Q. And has no regard to the fact that Pan American goes out there and has a greater density.

A. I believe that is correct, yes.

Q. Now some question was raised as to whether Pan American was seeking to duplicate the Northwest route. Pan American is already there, is it not?

A. Yes, sir.

Q. And was there, I take it, before Northwest was there, was it not?

A. Yes.

Q. What is this application that Pan American has in so far as that route is concerned across the Pacific?

A. My understanding is that under the existing Pan American certificate between the west coast of the United States and Japan, for example, Pan American is required to stop at Hawaii, and I believe that their present applica-

tion is to get non-stop rights from the west coast to Japan [fol. 714] which would give them, via the Great Circle, operating rights approximately equivalent to those which Northwest has.

Q. The only difference is over flying Hawaii, is it not?

A. Yes, sir.

Q. On a route which is otherwise established for Pan American.

A. Yes, sir.

Q. Mr. Mallory suggests to me that you do have there some place the figure of the density over Pan American's trans-Pacific route.

The Court: Let's not keep it a secret. Why don't you tell him?

A. I think it is 110.2.

Q. 110.2.

Now, if you are going to consider the economics of a route and the economic justification of competition, you would have to take into consideration the traffic of all carriers, would you not?

A. Yes, sir.

[fol. 715] Q. Now next I want to refer you, please, to Grace Exhibit 180, which was introduced to add to figures which you hadn't in your Exhibit 107, figures ending with the operating ratio for domestic trunk lines and U.S. local carriers, and first I will call your attention to the operating ratio of the local carriers for the years '56 and '57, respectively, of 103.3 and 100.4, and ask you to comment upon those figures in relation to the other figures which you have?

A. As has been mentioned several times, those local service carriers are heavily subsidized by the government. During the period of '56 and '57 a substantial number of them were on what is called open rates, that is, their final subsidy for the period had not yet been determined, so that what they were receiving was essentially temporary subsidy payments; and generally speaking, the Board has pursued a policy of paying the local service carriers that were operating on temporary rates only enough subsidy to break them even on their operating expenses without incorporating any rate of return element.

Now, I don't recall exactly how many carriers were on open rates during this period, but my recollection is that [fol. 716] it was a considerable number of the local service carriers.

Q. Does it sound right to you, 11 out of 13?

Mr. McKay: I object to the form of the question, your Honor, whether it sounds right to the witness.

Q. Let me ask you this: Do you know or don't you know that more than half of them were on an open rate?

A. More than half were on an open rate.

[fol. 717] Q. And does that mean that in the course of time there is going to be a recalculation of subsidy and that they are going to get more?

A. Yes, sir.

Q. Now reverting to the domestic trunk line corresponding figures of operating ratios for the year 1956 of 92.1 and 97 for 1957, would you comment, please, upon those figures?

A. Well, the operating ratio of 97 in 1957 is undoubtedly much below—it is very, very—it is a high ratio. This essentially reflects the deteriorating position of the domestic trunk lines during 1957 due to increased capacity, increased costs and so on. As a result of this, their general poor condition, the Board early in 1958 granted them a passenger fare increase, and there was a good deal of discussion in the industry as to what could be done to help these carriers get back on a more profitable basis. The Board gave them a second fare increase late in 1958. The White House exhibited enough concern about this problem so that it had a study made of the situation; and generally speaking, I think this operating ratio is certainly not typical of the recent experience of the domestic trunk carriers.

[fol. 718] Q. And it is an operating ratio without subsidy, is it not?

A. Virtually without subsidy.

Q. I will ask you to refer to Exhibit 181, and along the same line address your attention to the rate of return for the domestic trunk carriers for the years '56 and '57 of 3.2 per cent and 2.4 per cent respectively, and I will ask you

first whether those years are representative years of the experience of the trunk carriers?

A. No, sir. I would say that they were substantially below the experience of, let's say, the last ten years, where—

Q. All right, will you tell us what the experience has been of the domestic trunk carriers, year by year, for the last ten years?

A. Well, generally speaking, the rate of return for the trunk lines has been, since 1948 or '49, has been somewhere in the vicinity of 10 per cent. All years since 1949 have been above 10 per cent, with the exception of 1949, 1956 and 1957.

Q. And then what comment would you make, and further comment, in relation to this return for the year 1957?

[fol. 719] A. Well, it is untypically low.

Q. And does it enter accordingly into the observation that you made about the high operating ratio in 1957, leading to a rate increase?

A. Yes, sir.

Q. And as far as the Pan American and Panagra figures are concerned in these exhibits, both of operating ratio and rate of return, they include subsidy, do they not?

A. Yes, sir; they do.

Q. Will you now turn to your own set of exhibits, 114—

Mr. Peck: Could I have those?

Q. Turn, please, to Exhibit 114, about which there was some discussion by Mr. McKay and you about the added operating loss figure of 319,000 for Panagra under Assumption No. 1. I want to get it perfectly clear as to what that is and what you have described it as you have.

A. Well, we believe that this language was clear in the context of the exhibit. This was the operating loss resulting from operating over this additional segment. It can be regarded either as being an additive to other losses [fol. 720] or deducted from profits, if there were any. But there was a loss in the operating account in each of these categories, and we thought that this was a reasonable way of describing it.

Q. Now counsel asked you this morning, Mr. McKay,

about added competition by Panagra, including opening of Panagra's sales offices throughout the United States, as to whether that would not generate additional traffic; would you comment a little more fully upon that, Professor Cherington?

A. Well, we felt that it would probably not. Eventually, what you were doing here was to put in the sales offices for Panagra, but at the same time you were, through the termination of the general agency agreement with Pan American, taking away their effort in this field. This is applied—the sales effort would be applied to a route which has had competition for a number of years between—with Braniff, and we felt that it would be impossible to trace any additional traffic arising from these new sales offices, and that this was essentially a substitution of Panagra's somewhat reduced effort by Panagra, as against the agency effort by Pan Am.

Q. Yes, I was going to ask you, what is this added competition that we have been speaking about?

[fol. 721] A. It is for the local traffic essentially between Miami and Balboa.

Q. In other words, there would be no more through carriers then there are now; is that right?

A. That is correct.

Q. The through carriers now are Braniff and Pan American and Panagra, the combination.

A. Yes.

Q. And the through carriers, under your assumption, would be Braniff and Panagra, all the way.

A. That is correct.

Q. And the only difference in the situation would be Pan American competing on a local basis.

A. That is correct.

Q. And in sum, is it your opinion that that change in the competitive pattern and the introduction of additional independent Panagra offices would make any change in the traffic?

A. No, we think not.

Q. Now, would you comment, please, as to what you regard as the relative merits and the likely action of prudent management, assuming an independent Panagra carrying

through from Miami to the west coast of South America, as regards establishing offices at various locations, or turn-[fol. 722] ing their sales over to another airline like the TWA?

A. Well, I have a good deal of difficulty with the assumption that if the general agency agreement with Pan Am were terminated, that Panagra would be—would enter into an agency agreement with TWA, which has no knowledge of the area, no particular interest in the area or anything else. They are pretty busy with their own routes, which are essentially quite different. I think it was our general approach that if Panagra were to operate this Balboa-Miami route, they would essentially have to get into their own independent sales activity and it was for this reason that we added these traffic offices.

[fol. 723] Q. You were asked also this morning as to whether maintenance costs would be cheaper on the Miami-Balboa ~~sector~~ because the maintenance would be performed in the United States instead of South America. What is your comment on that, please?

A. The maintenance costs, as I indicated this morning, are the reported costs. They are the maintenance work, or they reflect essentially the maintenance work done in Miami at the present time, and we assume no change in this.

Q. I think the only other comment I would like to have you make in reference to this morning's cross-examination is in regard to your Exhibit 118 concerning your use of the Braniff experience on the ratio of non-passenger to passenger revenue rather than the Panagra experience below the Canal.

Would you comment further on that, please, and add the significance of it one way or the other.

A. As I tried to indicate to Mr. McKay, we had the Braniff experience which covers their routes both north and south of the Canal, we had the Panagra experience south of the Canal, and we had no figures or data for this factor on Pan American between Miami and Balboa.

[fol. 724] The indications are that as far as we can make out south of Balboa there was a substantially higher proportion of non-passenger revenue to passenger revenue than there is or would be between Miami and Balboa. Part

of this, as I recollect, is cargo, part of it is foreign mail which is handled, and so on.

So that the Braniff figure of 16.1 or 16.6 is the best approximation that we could get for this ratio as it might apply to the Miami-Balboa segment. It seemed inappropriate to use the existing Panagra ratio, and, as I indicated, we had no figure for Pan American.

Q. I am going to ask you some questions, Professor Cherington, about the route study, Government Exhibit No. 1139, which I shall refer to as the Grace study.

Are you familiar with that study, Professor Cherington, Government Exhibit 1139?

Mr. Kenney: Your Honor, may I make a point? It appears to me we are getting outside the cross-examination here.

Mr. Peck: Yes, I would say that that is possibly so, but I wouldn't suppose it made any difference one way or the other.

[fol. 725] The Court: No, I don't suppose so either. You can go through the formality of asking me whether or not you couldn't cover something that you forgot.

Mr. Peck: Well, you see, it is something which was put in by Mr. Kenney after I had finished the examination of the witness.

The Court: Yes. All right.

By Mr. Peck:

Q. Was that exhibit available to you during the preparation of the exhibits which have been offered under your testimony?

A. Yes, sir.

Q. And are you generally familiar with its contents?

A. Generally.

Q. Are you aware that that exhibit forecast a profit for operations by Panagra on the Miami-Balboa route in 1957 as contrasted with the loss shown in the exhibits which were offered on your examination?

A. Yes.

Q. In summary will you tell us whether you consider the

figures in the route study of Grace or in your forecast the more accurate and reliable?

A. We prefer our figures.

[fol. 726] Q. Now let us get down to the difference between them. What are the principal differences between the two studies?

A. Well, there are two principal areas of difference. One is that the Panagra-Grace study does not include any return element, whereas our study includes a rate of return on the additional investment required of 9 per cent; and since this is what essentially the return is now, we considered it reasonable to include this. This is the return that Panagra gets from Pan Am.

The second area of difference essentially is in the operating expenses, and here there are differences of about \$650,000 in direct operating expenses and about \$625,000 in the indirect areas.

So far as I can see the revenue figures, although there is a slight difference between passenger and non-passenger revenues, are about equal.

Have you put in exhibit form a comparison of the estimated financial results contained in Pan American Exhibit PS-114 through 129 with the estimates contained in the Grace study?

A. Yes, sir.

Q. And are these documents which I hand you such [fol. 727] comparisons?

A. Yes, sir.

Mr. Peck: I offer them in evidence, if your Honor please, as Pan American Statistical Exhibits 130 and 131.

(Marked Pan American Exhibits 130 and 131 in evidence.)

Q. Now would you run through these exhibits with us, please, Professor Cherington, and summarize what they show?

A. Well, I should explain first that on January 1, 1957, the Board's accounting system was somewhat altered and our study was run out on the basis of the new accounts, whereas the Panagra-Grace study was run out on the basis of the old chart of accounts.

Basically the changes that the Board made in its accounting system included the consolidation of direct and indirect maintenance into one account, the consolidation of ground and aircraft depreciation into one account, the spreading of expenses related to personnel out of general administrative expenses and through the functional accounts, and some rearrangement of the indirect expense accounts as between aircraft and traffic servicing and reservations and sales as against the previous system.

So that we have done our best here to put the Panagra-Grace figures and our own figures on a comparable basis in terms of this revised chart of accounts which, as I indicated, went into effect January 1, 1957.

But with that adjustment, and this is essentially an internal accounting problem, we believe that the right hand column here, the amount of difference, shows the comparison between the two studies and shows that in the revenue field we were very close, \$97,000 apart; in the expense field, as I previously mentioned, we were higher than the Panagra-Grace study by \$658,000; and in the indirect expense area by \$626,000.

These are the broad areas of difference.

Q. And do both estimates include the loss of interchange returns?

A. Yes, sir, they both do. But ours goes on and includes the return on additional investment.

Q. Now take the first difference between the two estimates; that of direct expense. Would you please discuss those differences?

[fol. 729] A. Well, there are two areas essentially. One is in flying operations where the difference is \$374,000. As I indicated this morning, we base our estimates essentially on the actual reported experience of Panagra in 1957. The Panagra-Grace study, in running out their estimates for flying operations and maintenance, used a number of different bases for flying operations. They used the first 11 months of 1955; for direct maintenance they used the calendar year 1955; and then in estimating their results for their existing system they used still a different base, which was the first three-quarters of 1956, blown up to a full

year by adding the highest of the first three-quarters of 1956.

We couldn't find any explanation as to why they used these varying bases, and as far as we could see the basis they used wholly failed to take into account the inflationary trends that were going on during this period.

Q. Can you give us some examples as to the comparative expenses for the years 1955, 1956, and 1957?

A. Yes, sir. In 1955, for example, DC-6B flying operations were 77 cents a plane mile, by 1957 these had increased to 83 cents, and it was the 83-cent figure that we [fol. 730] used converted to a revenue plane mile basis.

Similarly in 1955 the DC-6B direct maintenance expense was 21 cents a plane mile. By 1957 it had increased to 27 cents.

There were similar increases in the DC-7B operating accounts: Flying operations from 84 cents to 87 cents, and direct maintenance from 31 cents to 36 cents.

So that there were significant cost increases down to 1957 from the base periods that Panagra-Grace appears to have used in their study.

Q. And are the differences in such costs a primary reason for the \$600,000 difference in direct expense shown between the two studies?

A. With one exception they are, yes.

Q. What is the exception?

A. The exception is in this question of gasoline that we got into this morning.

Basically, as I indicated, we used 1957 system experience. We had no real data to go on as to what the gasoline cost to Panagra might be on the Miami-Balboa segment. I think it is probably fair to say that it would have been somewhat less. It conceivably might have been as high as [fol. 731] \$200,000 a year, but we think it probably would have been somewhat less.

Q. By virtue of what, buying gasoline in Miami or Balboa as distinguished from buying it in South America?

A. South America, where the cost presumably is somewhat higher than it is at Miami and Balboa.

Q. Now you say that difference as a maximum would be how much?

A. Well, it might be as high as \$200,000; but, again, we had no real data for making this estimate, so we used their experience.

Q. Well, if it were as much as \$200,000, would that put your expense estimates out of order by that amount or have them overstated to that extent?

A. We think not because there are some other estimates where essentially the numbers run the other way; that is, we have essentially under-estimated, and those occur basically in the station expenses that Panagra would experience at Miami and Balboa if they were to get into this operation.

Q. What kind of expenses are station expenses?

A. Well, this is the cost of employees and so on to run the station, fuel the aircraft, and the like, and they are [fol. 732] included in indirect expenses in aircraft and traffic servicing, whereas, it will be noted, we are under Panagra-Grace's estimate by \$174,000.

Q. That is, the estimate in the Grace study for these expenses is how much?

A. \$458,000.

Q. And you have used what figure?

A. \$284,000.

Q. So that at that basis you have understated by \$174,000.

A. Yes, sir.

Q. In the area of station expenses which you were not able to identify.

A. That is correct.

Q. All right. Now what is the next principal area of difference between your study and the Grace study?

A. As I indicated, there are differences in the various indirect expense accounts, the first one on the exhibit being in the area of reservations and sales.

Q. When you talk about the exhibit, you are talking about PS-130, is that right?

[fol. 733] A. PS-130.

Q. All right. Go ahead.

A. Where we show expenses of approximately \$318,000 more than the Panagra-Grace figures, and this is essentially a reflection of the ticket office costs we previously mentioned minus the commissions that are now being paid to Pan American.

Q. Those are expenses which are run out in detail in your Exhibit PS-122; is that right?

A. Yes, sir.

Q. Now, what about the rest of the difference?

A. There is a difference in the advertising expense of \$161,000. The Panagra-Grace study indicates that their ratio of advertising expense to commercial revenues, at the time they drew up their figures, was seven and a half per cent. They reduced this for the Balboa-Miami segment down to, I believe, five per cent, on the grounds that they were better known between Miami and Balboa than they were south of Balboa. We were unable to go along with that kind of reasoning, and we essentially based our estimates on their actual 1957 figure, which I believe was 7.7 per cent, on the ground that they would have to put as much advertising effort into this new segment as they were [fol. 734] in their present system.

Next, the—

Q. Further in that connection have you an opinion as to whether Panagra's selling facilities and personnel, entirely independent from Pan American advertising, publicity and the like, whether wise and prudent management would require at least the amount of expenditure which had previously been incurred by Panagra, or if anything more? Would you express an opinion on that?

A. Well, we felt that if they were to go on their own in this segment their advertising ratio would have to be at least as high as their current experience.

Q. Now, is there any other category of expense difference?

A. Yes, sir. There is the category of general and administrative expenses. Apparently the Panagra-Grace estimates are founded on the belief that they could take over the Miami-Balboa segment and operate it themselves for very little increased general and administrative expense. It was our feeling that essentially this expansion in their routes and operations, amounting to roughly a third in [fol. 735] terms of plane miles and traffic, would essentially create a substantial pool of additional G & A expense, and we based our figures on their '57 experience of a ratio of 9.7 per cent for the general and administrative expense

account to total cash expenses. Now this seems to, generally speaking, bear out the experience of the industry. As carriers grow larger their expense ratio tends to be maintained. Whether this is because of Parkinson's law or something else, we don't know. But for example, between '56 and '57 Northwest international's operations increased in terms of volume by about three million dollars, and their ratio went from 9.94 to 10.04. Braniff's international operations increased from, oh, roughly, 20 per cent, and their ratio of G & A to total cash expenses went from 8.65 to 8.74. And generally speaking, although in theory the bigger the operation, the lower the ratio of overhead, it just doesn't seem to work this way in the airline industry.

Q. Are there any services which are performed by Pan American for Panagra at the present time in this field of G & A that would have to be picked up anew by Panagra?

A. Yes, sir. As I understand it, Panagra would have to [fol. 736] set up its own revenue accounting setup for this segment. It would have to set up its own revenue collection setup, and I believe there are some others.

Q. Now, is it your conclusion overall, Professor Cherington, that Panagra could have operated the Miami-Balboa sector in 1957 without incurring a substantial loss?

A. I believe they would have incurred a substantial loss.

Q. I want to get as briefly as possible some other aspects of the Grace study which goes beyond Miami and Balboa. Have you considered the portions of the study relating to the proposed Miami-New York route and the proposed Balboa-California route?

A. In general terms. Our own study of course focused down on the Balboa-Miami segment, because at the outset it appeared that this was the more attractive, or the most attractive of the three. It also was the segment where most of the controversy has been over the past few years.

When we saw the results of our analysis on the Miami-Balboa segment, it didn't really seem to be necessary to work out detailed analysis and the kind of thing we did [fol. 737] for Miami-Balboa; for either the New York-Miami or the west coast of the U.S.-Balboa routes.

Q. Well, let's see if you can make some comments at least on the Miami-New York segment. Could you com-

ment, for example, on the estimated results, as set forth in the Grace study, dealing first with the matter of revenues?

A. Is this the New York-Miami segment?

Q. Yes.

A. Well, the revenues look, look pretty optimistic to us. In the first place, the Panagra-Grace study assumes a passenger load factor of 71 per cent for this operation, which would essentially involve two round trips a day between Miami and New York. We don't have any segment load factors for the—or for the domestic carriers that now operate, but we know, for example, in the case of National, a very high percentage of their traffic consists of this New York-Miami traffic, and in 1957 National's load factors were 59.7, and 56.1 in 1958. Northeast, which is the newest carrier in the route, had load factors in 1957 of 47.4, and they just held their own at the same level in 1958. Eastern, of course, has a much more extensive system, but a considerable proportion of their traffic is involved in the New York-Miami run, and their load, system load factors, were 59.5 and dropped to 52.8 in 1958.

So frankly, we have a good deal of difficulty in seeing how Panagra, with two round trips a day, originating down in South America as against the 50 or 60 one-way trips that there already are in this market from domestic carriers, could reasonably hope to obtain a 71 per cent load factor.

Q. Does the Grace study assume something in regard to increases in international first class traffic and the tourist traffic?

A. Yes. They assume—the Grace-Panagra study assumes that over, if I recall, over the New York-Miami segment, international first class traffic would increase by 20 per cent in the year from 1956 to 1957, and that coach traffic, international coach traffic, or tourist traffic, would increase by 30 per cent in the same period. This compares with their estimated increase over the Miami-Balboa segment of only 10 per cent.

Q. You think there was realism in this assumed increase?

A. It seemed to us that this was fairly optimistic, in [fol. 739] view of their general position in this market.

They also included 50—about 35,000, as I remember, New York-Miami passengers, or 53 per cent of the total number of passengers that they planned to handle, and I think that we have some—we have serious reservations about their getting this much domestic traffic.

Q. I want to make that clear. In other words, they figure that 53 per cent of the passengers that they carried over this projected route would be passengers who would not be through traffic to South America or into Central America, but would be domestic passengers between New York and Miami and between Miami and New York; is that correct?

A. That is correct.

Q. Now, what are your reflections about the likelihood of their realizing any such hope?

A. Well, we believe that their traffic would have been considerably less, but we did not make any detailed estimate of this.

Q. Do you think there would have been any likelihood of their getting the right to carry any domestic traffic at all?

A. Well, the Board has had this issue with respect to [fol. 740] Pan Am before it on two separate occasions, one, in the domestic route case in 1945 or '46, when Pan Am had an application in for this route and was turned down; and more recently in the New York-Florida case, where Pan Am had an application and the Board awarded the route by a 3 to 2 vote to Northeast, the other two members voting for Delta.

So I think that we certainly have reservations or real doubts as to whether it is realistic even to assume that Panagra would get certificated.

Q. Do any international carriers carry any domestic traffic?

A. Any pure international carriers?

Q. Yes. I mean, which come into a market then and pick up some domestic traffic on their international routes?

A. Not at the present time, but those carriers that operate, of course, in both areas.

Q. TWA, for example?

A. Yes.

Q. Now, do you have some observations on the cargo estimates in the Grace study?

A. Well, it is going to be pretty crowded in the cargo holds, as far as we can see. They assume that they will [fol. 741] be carrying somewhat more than 3,200 pounds of cargo southbound, as I recall, on each flight, some of which, approximately 40 per cent of which, will be domestic cargo. They also include some mail, and of course excess baggage.

As far as we can see, this is fairly optimistic again, in fact, very optimistic. The cargo business is essentially a 10 P.M. to 3 A.M. business, that is, when the cargo arrives at the terminal, and at least, according to the present schedules, Panagra takes off a good deal earlier on most of its flights.

Q. How many all purpose carriers are there on the New York-Miami route at the present time?

A. All purpose?

Q. Yes.

A. There are three.

Q. And is there any other all cargo carrier on the route?

A. Yes, sir. There is one all cargo. Riddle is an all cargo carrier, certificated on that route.

Q. What about expenses in the Grace study? What are your observations about them?

A. We did not do a detailed analysis of all their expenses. I believe it is fair to say that by and large our—[fol. 742] if we had done one, it would have come out essentially in the same general direction as our detailed comparative cost study on the Miami-Balboa route.

Q. You think their estimates are unrealistically low?

A. Yes.

Q. In your opinion, would such a route make money or lose money between Miami and New York?

A. Well, the Panagra-Grace estimates indicate a profit on the route of \$81,000. We believe that this would, in fact, if you made realistic assumptions and estimates for revenue and for expenses, we believe it in fact would result in a loss operation.

Q. Turn now to the proposed Mexico-California extension; what is your opinion as to the economic feasibility of such additional service by Panagra?

A. As far as we can see, again, this is not a promising route, from an economic standpoint, either for Panagra or for the public in general.

Q. Why not?

A. Well, turning in the first place to one of their basic assumptions, the question of whether they would be able to get traffic rights in Mexico City, without those rights their [fol. 743] load factor on that run would be 44 per cent, as I recall. Our aviation relations with Mexico have had a long and very trying career. Western Airlines was certificated from Los Angeles into Mexico City in 1946, and due to difficulties with the Mexican Government they didn't actually begin operating until, well, either late '57 or early '58, I don't remember which. I think that it is very unlikely that the Mexicans would permit a second U.S. carrier on the Los Angeles-Mexico City route, and I am not even sure that we would at the present time ask them for a second carrier.

Now, without the Mexico City stop, the route is very substantially weakened. Pan American has had an operation from Los Angeles to Guatemala City, and then down toward Balboa, and in some cases beyond. They got that route, as I recall, about 1950, and because they couldn't stop in Mexico City on the route, they have only been able to build up, I think, five schedules a week over the route.

Q. How many frequencies is proposed in the Grace study?

A. Three trips weekly, one operating through to Buenos Aires and two, as I recall, terminating at Lima.

[fol. 744] Q. And after you excluded the Mexico traffic, what would that leave as the load factor?

A. It is my recollection it is 44½ per cent.

Q. Could that possibly be a compensatory operation?

A. No, I think it clearly would not be.

Q. Do you have any other comments with respect to the manner in which study has been prepared?

A. Well, one aspect of the study is that within the revenues which the Panagra-Grace study shows for the route, they have included some revenues south of Balboa, and this—their net transfer, in other words, from their existing routes onto this new route segment, were \$646,000. In other words, they now pick up south of Balboa some traffic which

is turned over to them by Pan American or foreign flag carriers, which they assume they would handle on these new trips, and they have transferred from their existing system this net revenue of \$646,000. The effect of this is essentially to strengthen the Balboa-Los Angeles route and to reduce somewhat the strength of their present routes.

Q. Now, you have been discussing the individual parts of the Grace study; will you now summarize your conclusions [fol. 745] as to the total effect that the projected extensions would have on Panagra?

A. Well, our general conclusions are that either the Miami-Balboa route or the three proposed routes, Miami-Balboa, Miami-New York and Balboa-Los Angeles would essentially have a weakening effect which, if not up through subsidy, would certainly weaken Panagra. So that it is essentially either bad for Panagra or bad for the taxpayer, or conceivably bad for the travelers if it was taken out in increased fares.

Q. Does the Grace study lead to any different economic conclusion on your part than that reached in the study which you have sponsored?

A. Not, we believe, when properly analyzed.

Q. Does the Grace study include any evaluation of the effect of its projected operations of Panagra upon Pan American subsidy needs or any other carrier's needs or effects?

A. No, sir.

Q. Would you comment on that, just to the significance of it, please?

A. Well, as I think is made clear from our Exhibits 114 [fol. 746] to 129, with respect to the Balboa-Miami route, the impact of this on Panagra—on Pan American, or the impact of a Panagra route on Pan American, is fairly critical. In the case of Balboa-Los Angeles, we believe there would be a similar impact upon Pan American's existing Los Angeles-Guatemala City-Balboa route.

Q. With a consequence of further requirement of subsidy there?

A. Yes, sir.

Q. And are any other carriers involved here, who would be affected by extensions of the Panagra routes?

A. Well, of course, Panagra could in fact get a Mexico City-Los Angeles route, Western would be seriously affected, and on the east coast, Riddle, Northeast, National and Eastern would be adversely affected.

Q. And does that bear upon your opinion as to the likelihood of Panagra getting such routes?

A. Yes, sir. I think it makes it less likely.

Q. Do you have an opinion as to whether there would be any passenger benefits out of these extensions?

A. We don't really see any, no, sir.

[fol. 747] Q. And you have concluded that such extension would represent an economic loss to Panagra on all routes.

A. Yes.

Q. And increased losses and requirement for subsidy on the part of Pan American and certain local carriers, whose names you have mentioned; is that correct?

A. Yes, sir.

Mr. Peck: All right, that is all.

[fol. 751] Recross examination.

By Mr. McKay:

[fol. 752] Q. Would you say, Professor, that the estimates on revenue passenger-miles in that study could be considered as fairly conservative, or didn't you run that out?

A. I think I have already indicated that the revenue passenger-mile figures on New York-Miami are optimistic.

Q. What about the Miami-Balboa?

A. Generally speaking, if I recall, we don't quarrel too much with those.

Q. In fact, actual experience, as shown from your exhibits, shows that the figures were conservative and the projection was less than was actually experienced in 1957; isn't that correct?

A. I think that is approximately correct.

[fol. 754] Q. Professor, you testified in answer to Judge Peck's questions that with these added offices that I think

will cost us some million dollars under your assumption it wouldn't generate any new traffic; am I correct?

A. That's right.

Q. Why would a company invest a million dollars in new ticket offices if it wouldn't generate any new traffic?

A. Because they were giving up their general agency agreement with their present sales force.

Q. I know we went over this on cross. Do you say it is impossible for Panagra to work out an arrangement with TWA or some other non-competitive carrier and do just as well as they are doing today with Pan American, or [fol. 755] haven't you got an opinion on that?

A. My opinion is, if they work out an arrangement like that with a carrier like TWA, they would do less well than they do now.

Q. What about National, the company that they are interchanging with at the present time? Is your opinion the same?

A. Give up the Pan American general agency agreement and go with National?

Q. Yes, sir.

A. I think they would do less well.

[fol. 756] Q. I know we have covered this, Professor, I will be very brief, but I just want to make it absolutely clear. As I understand your testimony, the basis used by you for operating and maintenance costs for Panagra under assumption No. 1 is Panagra's experience over its present system in South America; correct?

A. Correct.

Q. And these costs are higher than those experienced by Pan American.

A. That is correct.

Q. However, when you consider the non-passenger versus the passenger revenue ratio, you take Braniff which is less than the Panagra experience ratio; correct?

[fol. 757] A. Correct.

Q. The result of your choice in both cases is to reduce Panagra's revenue and increase its expenses; correct?

A. That is right.

Q. You testified, Professor, I think in answer to one of Judge Peck's questions on redirect, that you doubted very much whether the government of Mexico would approve of this proposed route extension in the Panagra study. Are you familiar with the thinking of the government of Mexico in aviation matters?

A. I followed our aviation relations with Mexico since I was with the Board.

Q. And you keep current?

A. Generally speaking.

Q. And can you say today that you are very doubtful the government of Mexico would approve the route extension?

A. I can.

Q. And, if so, on what basis?

A. On the grounds that to permit this second carrier in the Mexico-Los Angeles route would be essentially a reversal of the position that they have adhered to for a [fol. 758] long time.

Q. It wouldn't be the first time a government reversed itself, however, would it, in matters of policy?

A. No, it would not.

Q. One last question, Professor. This study that you referred to as the Panagra-Greece study, have you seen any Panagra-Pan American study along the same lines proposing route extensions for Panagra?

A. For Panagra?

Q. Yes.

A. No, I haven't.

Q. Do you know, Professor, whether Pan American has submitted any study to the board of directors of Panagra proposing route extensions?

A. Not that I know of.

[fol. 774a]. Reporters' Certificate to foregoing transcript (omitted in printing).